# **Field Evaluation of Almond Varieties**

Project No.:	15-HORT2-Lampinen
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# **Objectives:**

The first objective of this project is to evaluate performance of pollenizers and Nonpareil clones in a replicated field trial in McFarland California. The final year of data collection at the McFarland site was in 2015. The second objective is to use the replicated data on light interception and yield to assess the relative productivity per unit of light intercepted for the Nonpareil clones, varieties and selections. The third objective is to begin data collection on the next generation almond variety trials.

# Interpretive Summary:

Yields at the McFarland trial continue to be high compared to the 1993 regional almond variety trials. The McFarland trial reached an average production of 3000 kernel pounds per acre in the 5<sup>th</sup> growing season which was six years earlier than the 1993 Kern RAVT while neither the 1993 Butte or the 1993 Delta trials ever reached this level of production. In order to develop the canopy this quickly, water and other inputs need to be high and this has resulted in high disease pressure (especially hullrot). Because this trial is replicated, unlike the earlier regional almond variety trials, we have the opportunity to more accurately assess yield differences among the Nonpareil clones, varieties and selections. In addition, because we have detailed light interception data, we can assess whether differences in productivity among varieties and selections are due to faster canopy growth or higher productivity per unit light intercepted. Nonpareil yields varied from 4300 to almost 5000 kernel pounds per acre in 2011 and continued to be generally higher than pollenizer yields. In 2012, yields were down substantially compared to 2011, most likely due to alternate bearing. In 2013, yields increased but

were not as high as 2011. Yields in 2014 and 2015 were still quite high although there appears to be a gradual decline since 2011 or so. There is some separation of cumulative yields for the Nonpareil clones with Nonpareil-Nico highest and Nonpareil-5, Nonpareil-6 and Nonpareil-Jones all having significantly lower cumulative yields. Hullrot continued to be the major disease related problem with the highest levels in 2-19e (Kester) and Kochi with the Nonpareil clones having intermediate hullrot pressure. Hullrot pressure was minimal in 2013-2015. Summary data from the 2006 to 2015 seasons shows that although bloom period varied significantly from one year to the next, in general, overlap of Nonpareil bloom with pollenizers was good in all years.

The next generation Regional Almond Variety Trials were planted in the winter of 2014 in Butte (Chico State University), Stanislaus (Salida School District Site), and Madera (Chowchilla grower site) counties. Nonpareil was alternated with 30 varieties and/or selections at all 3 sites. Trees at the Butte, Stanislaus and Madera trial were planted on Krymsk 86, Nemaguard and Hansen 536 rootstocks respectively (with the exceptions listed at the bottom of **Table 5**). Unlike the previous generation Regional Almond Variety Trials, there are four replications of each of the varieties and selections at each of the three sites in the 2014 trials.

# **Materials and Methods:**

#### McFarland Variety Trial

This report will concentrate on a replicated variety trial of eight varieties and eight Nonpareil clones that was planted in 2004 in Kern County near McFarland. Soils at the site consist of McFarland loam and Wasco sandy loam (both Class I soils). The irrigation system is double line drip. Tree spacing is 20 feet between tree rows and 18 feet between trees for a density of 121 trees per acre. Varieties planted included Chips, Kahl, Kochi, Marcona, Selection 2-19e (Kester), Sweetheart and Winters. Nonpareil clones planted include Nonpareil 3-8-2-70, Nonpareil 5, Nonpareil 6, Nonpareil 7, Nonpareil Dr., Nonpareil-J, Nonpareil-Newell and Nonpareil-Nico. There are six replications of each variety and Nonpareil clone with 34 trees per replication. Pollenizer and Nonpareil rows alternate in the orchard.

In 2015, data was collected on bloom and maturity timing, yield and midday canopy light interception. In 2006, 2007 and 2008, midday canopy light interception was measured manually using a hand lightbar. From 2009 to 2015, the mobile platform light bar (described in report for Almond Board project titled 15-HORT13-Lampinen, "Development and Testing of a Mobile Platform for Measuring Canopy Light Interception and Stress in Almond") was used to measure midday canopy light interception at the McFarland trial.

# Regional Almond Variety Trials Planted in 2014

The next generation almond variety trials were planted in the winter of 2014 in Butte (Chico State University), Stanislaus (Salida School District Site), and Madera (Chowchilla grower site) counties. The varieties and selections planted are listed in **Table 5**. The first 31 items are common to all 3 sites and a few different items added at individual sites are listed at the bottom of **Table 5**. Trees at the Butte, Stanislaus and

Madera trial were planted on Krymsk 86, Nemaguard and Hansen 536 rootstocks respectively (with the exceptions listed at the bottom of **Table 5**). Trees were planted at a spacing of 18' x 22' at the Butte site (110 trees/acre), 16' x 21' at the Stanislaus site (130 trees/acre) and 12' x 21' at the Madera site (173 trees/acre). These densities are significantly higher than the previous generation RAVTs where planting densities for the Butte, San Joaquin and Kern trials were 64, 75 and 86 trees per acre respectively. Of the 32 items planted in the main trials, fourteen are either partially of fully self-fertile.

#### **Results and Discussion:**

#### McFarland Trial

The grower started ripping every other row center in 2009 and this has resulted in significant improvements in water penetration in the orchard. This procedure has continued and appears to be beneficial with much better water penetration observed.

Weather during bloom was generally good at the McFarland trial site. For the 2015 bloom period there were 150 good bee flying hours (temperature  $\geq$  59°F, windspeed  $\leq$  10MPH, and no rain). This compared to 182, 91, 58, 94, 103, 175 and 146 good bee flying hours in 2008-2014 respectively.

Although the absolute date of bloom for all varieties varied from year to year, bloom overlap among the Nonpareil clones and pollenizers was good in every year (**Figure 3**, **4**). Although the bloom dates vary considerably from year to year, the relative bloom dates among the Nonpareil versus pollenizers all appear to shift together. Average bloom dates for the 2006 to 2015 seasons are shown in **Figure 5**.

In 2015 hullsplit initiation and completion was earlier than average by about 2.5 weeks (**Figure 7**). This is the earliest we have observed during this trial to date. The average hullsplit progression for 2006 to 2015 is shown in **Figures 6 and 7** and the average progression for all years in **Figure 8**.

In 2010, scab was only observed on Winters and Nonpareil-5 and in 2011 on Winters and selection 2-19e (Kester) (**Table 1**). In 2012, scab was present at low level on most varieties and selections. In 2013, scab was present only in Kahl, Marcona and Winters and in 2014 only in Kochi and Winters (**Table 1**). *Alternaria* was not present in 2010 but in 2011 and 2012 all Nonpareil selections and pollenizers had some present with the worst being in Kahl, Winters, Kochi and Marcona (**Table 1**). In 2013, *Alternaria* was not observed in Nonpareil selections but was present in Sweetheart, Chips, Kahl, Marcona and Winters (**Table 1**). In 2014, Alternaria was worst in Winters, Kahl, Sweetheart and Marcona (**Table 1**). Hullrot continued to be the main problem at this site. There was substantial hullrot in all varieties and selections with the most severe disease pressure in Kochi and Winters in both 2010 and 2011 (**Table 1**). Kochi also displayed severe hullrot in 2008 and 2009. There was also substantial hullrot in all the Nonpareil clones in 2010 and slightly less in 2011(**Table 1**). Overall, hullrot levels decreased from 2012 to 2014, with 2014 showing the lowest presence in five years (**Table 1**). Yield data for the McFarland trial from the 2006 through 2015 seasons are shown in **Table 2, 3 and 4**. All of the Nonpareil clones have tended to have higher cumulative yield compared to most of the pollenizers (**Table 4**). Among the Nonpareil clones, there is some separation regarding cumulative yield with Nonpareil Nico, Nonpareil 38270 and Nonpareil Newell having the highest cumulative yields (**Table 4**). Selection 2-19e (Kester) has had the highest cumulative yield among all of the pollenizers in the trial followed by Winters, Chips, Kahl, Sweetheart, Kochi and Marcona (**Table 4**). The replication provided in this trial adds much value to the data compared to earlier unreplicated variety trials but it comes at a cost in terms of the time required for maintaining, rating and harvesting the plots.

The yields from this trial continue to be high for the age of the orchard. **Figure 1** shows average yield by orchard age for all varieties, selections and Nonpareil sources for the Butte, Delta and Kern trials planted in 1993 compared to the McFarland trial planted in 2004. The McFarland trial reached an average production of 3000 kernel pounds per acre six years earlier than the 1993 Kern RAVT while neither the Butte or Delta trials ever reached this level of production (**Figure 1**). Yields have tended to alternate around 3700 kernel pounds per acre for the past few years which is in the range of what would be expected based on light interception levels although there appears to have been a gradual decline since 2011 or so (**Figure 2**). This has been observed on other orchards as well with the peak in production occurring around 11 years of age.

The productivity per unit canopy light interception was quite high for the size of the tree in 2009 (ranging from 52 to 85 kernel pounds per unit light intercepted) and was still fairly high in 2010 (ranging from 23 to 51 kernel pounds per unit light intercepted) since our previous data has suggested 50 kernel pounds per unit light intercepted is near the normal maximum for almond (**Table 3**). In 2011, yield per unit light intercepted averaged 74.8 for the Nonpareil clones and 40 to 65 for the pollenizers (**Table 3**). This trend towards yield per unit PAR intercepted in the range of 50 has continued in 2013 and 2014 (**Table 4**). **Figure 2** shows the yield per unit PAR intercepted by variety or selection for all years of the study (data for Nonpareil sources are averaged). This figure suggests that the yields tend to alternate around 50 kernel pounds per 1% PAR intercepted line while some other varieties have averaged below the line (see average values in legend for **Figure 2**). As noted earlier though, overall yields appear to have been declining for several years.

#### Regional Almond Variety Trials Planted in 2014

The Butte, Stanislaus and Madera sites were planted in the winter of 2014 (see Materials and Methods section). **Table 5** lists items planted at the trials. Bloom, hullsplit, canopy light interception and yield data collection were initiated in 2016. All of the sites are growing well and although the Butte trial was short about 60 trees from the nursery at planting and some trees were lost at all 3 sites, they have mostly been replaced. Bloom, hullsplit and yield data were collected starting in 2016 and will be reported at the 2016 Almond Board Conference and in the 2017 Annual Report.



Butte Trial- August 2016



Madera Trial- August 2016



Stanislaus Trial- July 2016

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**Table 1.** Scab rating, *Alternaria* rating, and hullrot strikes per tree for the 2010-2014 seasons at the McFarland trial. Letters indicate significant difference at the 5% level of significance.

	Scab Rating		Alternaria rating		Hull Rot Strikes
selection 2-19e	0.00 a	Chips	0.00 a	Kahl	8.33 a
Chips	0.00 a	Kahl	0.00 a	Sweetheart	11.00 a
Kahl	0.00 a	Kochi	0.00 a	Marcona	13.33 a
Kochi	0.00 a	Marcona	0.00 a	selection 2-19e	18.83 a
Marcona	0.00 a	Nonpareil 3-8-2-70	0.00 a	Price	23.01 a
Nonpareil 3-8-2-70	0.00 a	Nonpareil-5	0.00 a	Chips	24.00 a
Nonpareil-6	0.00 a	Nonpareil-6	0.00 a	Nonpareil-Nico	30.67 a
Nonpareil-6 Nonpareil-7	0.00 a	Nonpareil-7	0.00 a	Nonpareil 3-8-2-70	61.33 a
Nonpareil-DR	0.00 a	Nonpareil-DR	0.00 a	Nonpareil-J	62.67 a
Nonpareil-J	0.00 a	Nonpareil-J	0.00 a	Nonpareil-5	65.17 a
Nonpareil-Newell	0.00 a	Nonpareil-Newell	0.00 a	Nonpareil-7	72.67 a
Nonpareil-Nico	0.00 a	Nonpareil-Nico	0.00 a	Nonpareil-6	82.83 a
Price	0.00 a	Price	0.00 a	Nonpareil-Newell	83.67 a
Sweetheart	0.00 a	selection 2-19e	0.00 a	Nonpareil-DR	98.17 a
Nonpareil-5	1.00 a	Sweetheart	0.00 a	Kochi	262.00 b
Winters	2.00 b	Winters	0.00 a	Winters	539.67 c

	Scab Rating		Alternaria rating		Hull Rot Strikes
Chips	0.00 a	Nonpareil-Nico	0.67 a	Kahl	2.33 a
Kahl	0.00 a	Nonpareil-7	0.67 a	Marcona	3.33 a
Kochi	0.00 a	Nonpareil-J	0.83 a b	Chips	5.00 a b
Marcona	0.00 a	Sweetheart	1.00 a b	Nonpareil-DR	10.33 a b
Nonpareil 3-8-2-70	0.00 a	Nonpareil-Newell	1.00 a b c	Nonpareil-Nico	10.67 a b
Nonpareil-5	0.00 a	Nonpareil-5	1.00 a b c	Nonpareil-5	15.00 a b
Nonpareil-6	0.00 a	Nonpareil-6	1.00 a b c	Nonpareil 3-8-2-70	22.00 a b c
Nonpareil-7	0.00 a	Nonpareil 3-8-2-70	1.00 a b c	Nonpareil-J	26.67 a b c
Nonpareil-DR	0.00 a	2-19E	1.17 a b c d	Nonpareil-7	31.00 a b c
Nonpareil-J	0.00 a	Nonpareil-DR	1.17 a b c d	Nonpareil-Newell	34.00 a b c
Nonpareil-Newell	0.00 a	Chips	1.50 bcd	Nonpareil-6	39.67 a b c
Nonpareil-Nico	0.00 a	Marcona	1.67 cde	Sweetheart	48.67 a b c
Sweetheart	0.00 a	Kochi	1.83 de	2-19E	94.00 b c
2-19E	0.17 b	Winters	2.33 е	Winters	104.83 c
Winters	3.00 c	Kahl	2.33 е	Kochi	325.83 d

Sci	ab Rating	7	Alterna	ria rating	7	Hull H	Rot Strike	es.
Nonpareil-5	0.0	а	Nonpareil-6	0.67	а	Marcona	0.00	а
Chips	0.0	а	Nonpareil-Newell	0.83	а	Kahl	1.83	a b
Kahl	0.2	a b	Nonpareil 3-8-2-70	0.83	а	Chips	4.17	abc
Nonpareil-J	0.2	a b	Nonpareil-Nico	0.83	а	Nonpareil-Nico	13.83	abcd
Nonpareil-6	0.2	a b	Nonpareil-DR	0.83	а	Nonpareil-DR	17.17	abcd
2-19E	0.3	abc	Chips	1.00	а	Nonpareil 3-8-2-70	23.67	abcde
Nonpareil-Nico	0.3	abc	Nonpareil-J	1.00	а	Nonpareil-5	25.00	abcde
Nonpareil-7	0.5	abc	Sweetheart	1.00	а	Nonpareil-7	25.00	abcde
Nonpareil-DR	0.5	abc	Nonpareil-7	1.00	а	Nonpareil-Newell	30.67	bcde
Marcona	0.5	abc	Kahl	1.17	а	Nonpareil-J	33.17	cdef
Kochi	0.5	abc	Nonpareil-5	1.17	а	Sweetheart	41.83	def
Nonpareil 3-8-2-70	0.7	bc	Marcona	1.50	b	Winters	47.17	e f
Nonpareil-Newell	0.8	С	Kochi	1.50	b	Nonpareil-6	47.17	e f
Sweetheart	1.8	d	2-19E	1.50	b	Kochi	56.67	fg
Winters	3.0	е	Winters	2.50	С	2-19E	81.00	g

	Scab F	Rating		Alternaria	rating		Hull I	Rot Strikes	
	Nonpareil-DR	0.0	а	Nonpareil-J	0	а	Marcona	2.83 a	
	Nonpareil-7	0.0	а	Nonpareil-DR	0	а	Kahl	3.33 a	
	Nonpareil-J	0.0	а	Nonpareil-7	0	а	Chips	9.50 ab	
	Nonpareil-5	0.0	а	Nonpareil-Newell	0	а	Winters	16.83 ab	
	Nonpareil-6	0.0	а	Nonpareil-Nico	0	а	Nonpareil-Nico	21.00 abc	
$\omega$	Nonpareil-Newell	0.0	а	Nonpareil 3-8-2-70	0	а	Nonpareil-6	21.50 abc	
01	Kochi	0.0	а	Nonpareil-5	0	а	Sweetheart	22.00 abc	
õ	Nonpareil 3-8-2-70	0.0	а	Nonpareil-6	0	а	Nonpareil 3-8-2-70	22.67 abc	
	2-19E	0.0	а	Kochi	0	а	Nonpareil-5	23.17 abc	
	Sweetheart	0.0	а	2-19E	0	а	Nonpareil-7	24.17 abc	
	Nonpareil-Nico	0.0	а	Sweetheart	1	а	Nonpareil-J	28.17 abc	
	Chips	0.0	а	Chips	1	b	Nonpareil-DR	30.33 abc	
	Kahl	0.2	a b	Kahl	1	b	Nonpareil-Newell	33.33 bc	
	Marcona	0.3	b	Marcona	1	b	Kochi	51.00 c d	
	Winters	1.2	с	Winters	2	с	2-19E	68.67 d	

	Scab R	ating	A	Iternaria I	rating		Hull R	ot Strikes
Kester (2-19E)	0	а	Nonpareil-J	0.0	а	Kahl	0	а
Nonpareil-7	0	а	Nonpareil-5	0.0	а	Marcona	0	а
Nonpareil-Newell	0	а	Nonpareil 3-8-2-70	0.0	а	Sweetheart	1	а
Nonpareil-J	0	а	Nonpareil-7	0.0	а	2-19E	2	а
Nonpareil-5	0	а	Nonpareil-Nico	0.0	а	Nonpareil 3-8-2-70	2	а
Nonpareil 3-8-2-70	0	а	Nonpareil-6	0.0	а	Winters	2	а
Nonpareil-DR	0	а	Nonpareil-Newell	0.2	a b	Chips	3	а
Nonpareil-6	0	а	Kochi	0.3	a b	Nonpareil-Nico	3	a b
Marcona	0	а	2-19E	0.5	bc	Nonpareil-7	4	abc
Kahl	0	а	Nonpareil-DR	0.5	bc	Nonpareil-6	5	abc
Sweetheart	0	а	Chips	0.5	bc	Nonpareil-Newell	5	abc
Nonpareil-Nico	0	а	Marcona	0.8	c d	Nonpareil-5	6	abc
Chips	0	а	Sweetheart	1.0	d e	Nonpareil-J	11	bc
Kochi	0.17	а	Kahl	1.3	е	Nonpareil-DR	11	С
Winters	2.17	b	Winters	3.0	f	Kochi	25	d

**Table 2.** Number of nuts per tree, average kernel weight, shelling percentage, kernel pounds per unit of photosynthetically active radiation (PAR) intercepted, kernel pound per acre, cumulative kernel pounds per acre for the 2006 through 2008 seasons. Data for each year is sorted by cumulative yield, which is summed from the beginning of the project. Selection 2-19e was recently released as Kester. Letters indicate significant difference at the 5% level of significance.

2006				I	Kernel pounds per		
			Shelling		_	_	Cumulative kernel
Variety	No. of nuts/tree	verage kernel wt (	percentage	unit PAR int.	Tree	Acre	yield (lbs/acre)
2-19e	6852 a	0.94 g	53.0 d	45.5 a	14.2 a	1718 a	1718 a
Winters	6648 a	0.87 h	53.4 d	47.9 a	12.7 a	1540 a	1540 a
Marcona	3611 bcd	1.31 a	30.7 f	41.4 a	10.4 b	1258 b	1258 b
Nonpareil-Ni	4246 b	1.09 cde	67.2 a	32.4 b	10.2 bc	1232 bc	1232 bc
Nonpareil-5	3713 bcd	1.12 bcd	67.9 a	30.1 b	9.2 bcd	1110 bcd	1110 bcd
Nonpareil-D	3867 bc	1.07 def	63.4 abc	29.9 b	9.1 bcd	1103 bcd	1103 bcd
Nonpareil-3-8-2-70	3848 bc	1.07 cde	64.6 ab	30.6 b	9.1 bcd	1101 bcd	1101 bcd
Nonpareil-Ne	3815 bc	1.07 cde	67.7 a	28.2 b	9.0 bcd	1086 bcd	1086 bcd
Nonpareil-6	3886 bcd	1.12 bc	67.0 a	28.3 b	8.9 bcd	1075 bcd	1075 bcd
Nonpareil-J	3717 bcd	1.08 cde	64.0 abc	28.4 b	8.8 bcd	1066 bcd	1066 bcd
Chips	3623 bcd	1.02 f	53.8 d	26.9 b	8.1 bcde	985 bcde	985 bcde
Kochi	3134 cd	1.16 b	59.9 c	26.7 b	8.0 cde	965 cde	965 cde
Nonpareil-7	3288 bcd	1.08 cde	65.1 a	24.4 bc	7.8 de	941 de	941 de
Kahl	3139 cd	1.06 ef	47.8 e	31.0 b	7.4 de	889 def	889 def
Sweetheart	2777 d	0.95 g	67.8 a	16.7 c	5.6 f	681 1	681 f
2007					Kernel pounds per		
			Shelling				Cumulative kernel
Variety	No. of nuts/tree	verage kernel wt (	percentage	unit PAR int.	Tree	Acre	vield (lbs/acre)
2-19e	13149 a	0.78 e	54.3 d	58.4 ab	22.8 a	2756 a	4474 a
Winters	11972 ab	0.83 de	60.2 b	65.8 a	21.8 ab	2634 ab	4173 a
Nonpareil-Newell	10659 bc	0.90 bc	67.3 a	52.9 bc	21.0 abc	2543 abc	3626 b
Nonpareil-Nico	9260 cde	0.92 bc	66.0 a	47.1 cde	18.8 abcd	2279 abcd	3511 b
Nonpareil-Driver	9793 cd	0.91 bc	65.6 a	51.1 bc	19.6 abcd	2371 abcd	3474 b
Nonpareil-5	8905 cdef	0.95 b	67.0 a	49.3 bcd	19.0 abcd	2299 abcd	3410 b
Nonpareil-3-8-2-70	9340 cde	0.92 bc	66.3 a	50.8 bc	18.9 abcd	2293 abcd 2291 abcd	3393 b
Nonpareil-7	9517 cd	0.92 bc	67.9 a	48.1 bcde	19.3 abcd	2332 abcd	3272 bc
Marcona	6938 fq	1.08 a	29.8 f	52.8 bc	16.5 def	1995 def	3252 bcd
Kahl	9594 cd	0.91 bc	47.6 e	65.2 a	19.3 abcd	2332 abcd	3222 bcd
Nonpareil-J	9137 cde	0.89 bcd	65.5 a	44.4 cde	17.8 bcde	2152 bcde	3218 bcd
Nonpareil-6	8396 def	0.94 b	67.1 a	43.3 cde	17.4 cde	2103 cde	3178 bcd
Chips	7681 defa	0.94 D 0.87 cd	54.4 d	38.9 def	14.7 ef	1780 ef	2766 bcd
Kochi		1.08 a	59.4 bc	37.9 ef	14.7 ef	1729 ef	2694 de
Sweetheart	6006 g 6767 fg	0.89 bcd	66.6 a	31.2	14.3 ei 13.1 f	1588 1	2165 e
Sweetnean	6767 lý	0.89 DCu	00.0 a	31.2	13.1	1000	2105 e
2008					Kernel pounds per		
			Shelling				Cumulative kernel
Variety	No. of nuts/tree	verage kernel wt (	percentage	unit PAR int.	Tree	Acre	vield (lbs/acre)
2-19e	13472 a	0.93 a	54.3 d	56.5 bcde	27.4 cd	3321 cd	7795 a
Nonpareil-Nico	13879 a	1.10 cd	66.0 a	67.5 a	33.5 a	4056 a	7567 ab
Nonpareil-3-8-2-70	12506 bcd	1.17 cd	66.3 a	66.0 a	30.7 b	3714 b	7106 bc
Nonpareil-5	12883 ab	1.08 de	67.0 a	63.9 ab	30.5 b	3692 b	7102 bc
Nonpareil-Newell	11916 bcd	1.09 de	67.3 a	57.3 bcde	28.6 cd	3456 cd	7086 bc
Nonpareil-Driver	12729 abc	1.05 de	65.6 a	62.5 abc	29.8 bc	3611 bc	7085 bc
Nonpareil-7	13250 ab	1.07 de	67.9 a	62.3 abc	31.1 ab	3763 ab	7035 bc
Winters	9872 e	1.02	60.2 b	53.4 def	22.1 fg	2670 g	6843 c
Nonpareil-6	10707 de	1.16 c	67.1 a	54.7 cde	27.3 cd	3300 cd	6478 cd
Nonpareil-J	110707 de	1.18 C	65.5 a	54.7 Cde	27.3 Cd 26.6 de	3224 de	6442 cd
Kahl	10720 de		47.6 e	61.2 abcd	20.0 de 22.6 fg	2733 fg	5954 de
Chips	10720 de 11465 cd	0.96 fg 0.97 fg	47.6 e 54.4 d	51.8 ef	22.6 ig 24.4 ef	2733 lg 2956 ef	5954 de 5722 ef
Sweetheart	13149 ab	, i i i i i i i i i i i i i i i i i i i	54.4 d 66.6 a	45.3 f	24.4 er 23.9 ef	2956 ef 2893 ef	
Marcona	4721 f	0.82 g 1.39 a	29.8 f	45.3 T 36.9	23.9 er 14.5 ł	2893 er 1748 h	
	5882 f	1.39 a 1.28 b		35.0	14.5 r 16.5 r	2002 h	
Kochi	JOOZ I	1.28 D	59.5 bc	35.0	10.5 ľ	2002 n	4696 g

**Table 3**. Number of nuts per tree, average kernel weight, shelling percentage, kernel pounds per unit of photosynthetically active radiation (PAR) intercepted, kernel pound per acre, cumulative kernel pounds per acre for the 2009 through 2012 seasons. Data for each year is sorted by cumulative yield, which is summed from the beginning of the project. Selection 2-19e was recently released as Kester. Letters indicate significant difference at the 5% level of significance.

No. of nutritive         Average terrel with part internal performance inter part internal performance inter part internal performance inter part internal performance interpart internal								
No. of nutrities         Average kernel Varianty         Shelling Varianty         Train (in) DAB Int.         Train Train         Cumulative kernel Varianty           Varianty         1372 de Varianty         1372 de Varianty         1373 de Varianty	2009				ł	Kernel pounds per		
Normani-Nem         1.073 a.h.         1.05 bod         7.47 a.h.         60.3 abcd         31.8 a.h.         386 a.h.         1.1417 a.h.           Arbe         1.05 bod         7.47 a.h.         10.3 abcd         7.18 abc         22.1 a.h.         4004 a.h.         1.1050 a.h.           Arbe         1.076 a.h.         1.08 b.h.         1.08 b.h.         7.18 abc         22.1 a.h.         4004 a.h.         1.1060 a.h.           Arbe         1.076 b.h.         1.04 b.h.         7.18 abc         23.1 a.h.         1.000 a.h.         1.000 a.h.           Arbe         7.26 abc         7.4 abc         23.4 b.h.         3.976 ab.         1.000 abc         1.000 abc           Arrayamin         1.000 b.h.         1.03 b.b.d.         7.1 a ch         6.08 abcd         20.7 abc         3.976 b.c.         3.977 b.c.         1.9007 abc         1.9007 abc         1.9007 abc         3.977 b.c.         1.9007 abc         1.977 abc         1.977 abc         1.977 abc         1.972 abc         2.11 abc         2.21 abc         2.21 abc         2.22 abc         2.21 abc         2.22 abc         2.21 abc         2.22 abc         2.22 abc         2.72 abc<			Average kernel	Shelling				Cumulative kernel
Normani-Nem         1.073 a.h.         1.05 bod         7.47 a.h.         60.3 abcd         31.8 a.h.         386 a.h.         1.1417 a.h.           Arbe         1.05 bod         7.47 a.h.         10.3 abcd         7.18 abc         22.1 a.h.         4004 a.h.         1.1050 a.h.           Arbe         1.076 a.h.         1.08 b.h.         1.08 b.h.         7.18 abc         22.1 a.h.         4004 a.h.         1.1060 a.h.           Arbe         1.076 b.h.         1.04 b.h.         7.18 abc         23.1 a.h.         1.000 a.h.         1.000 a.h.           Arbe         7.26 abc         7.4 abc         23.4 b.h.         3.976 ab.         1.000 abc         1.000 abc           Arrayamin         1.000 b.h.         1.03 b.b.d.         7.1 a ch         6.08 abcd         20.7 abc         3.976 b.c.         3.977 b.c.         1.9007 abc         1.9007 abc         1.9007 abc         3.977 b.c.         1.9007 abc         1.977 abc         1.977 abc         1.977 abc         1.972 abc         2.11 abc         2.21 abc         2.21 abc         2.22 abc         2.21 abc         2.22 abc         2.21 abc         2.22 abc         2.22 abc         2.72 abc<	Varietv	No. of nuts/tree	wt (g)	percentage	unit PAR int.	Tree	Acre	vield (lbs/acre)
Norpisel-Newell         14513 a         1.03         bod         7.48 au         7.28 abc         33.1 a         4004 a         11080 a           Verighted         13706 a         1.032 bb         1.75 a         7.1 ab         2.29 a         3371 m         11080 a           Verighted         13806 ab         1.032 bb         1.75 a         0.75 ab         2.25 b         3371 m         11080 a           Verighted         13905 ab         1.032 bb         1.75 ab         7.7 b         2.25 b         3371 m         11080 a           Verighted         1.3205 ab         1.022 bb         1.02 bb		13773 ab						
2-he         4470 a         0.64         1         65.6         1         71.6         acc         27.1         c         3307         a         11060 a           Vergenel 0.42-70         1028 bb         1.03 bb         1.04 bb         76.8 abc         77.8 abc         3377 a         1006 abc         1006 abc           Vergenel 0.42-70         1028 bb         1.04 bb         77.2 cd         68.9 abc         327.0 bc         397.8 bc         1016 bc           Vergenel 0.13256 bb         1.02 bcd         77.1 cd         68.9 abcd         327.0 bc         387.8 bc         397.8 bc         1017.8 bc           Vergenel 0.13256 bb         1.02 bcd         77.1 cd         68.9 abcd         327.0 bc         381.8 bc         397.8 bc         1018 bc         1017.8 bc         1017.8 bc         301.8 bc         397.8 bc         397.8 bc         1017.8 bc         1017.8 bc         301.8 bc         397.8 bc <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>								
Norganilo Durar         1386 ab.         1.08 ab.         75.1 ab.         20.8 a.         307 ab.         1.1062 ab.           Norganilo 3.2.756 ab.         1.04 bb d         77.6 ab.         1.04 bb d         77.6 ab.         307 bb.         1.1002 ab.           Norganilo 1.102 bb d.         1.03 bb d         7.23 ab.         6.5 ab.d.         307 bb.         1.002 bb.         0.001 bb.           Norganilo 1.102 bb.         1.02 bb.         0.5 ab.d.         3.02 bb.         0.01 bb.         0.01 bb.         0.05 bb.         0.01 bb.         0.05 bb.         0.05 bb.         0.01 bb.         0.05 bb.         0.05 bb.         0.01 bb.         0.05 bb.								
Noncose1-08-270         13758 ab         1.04. bod         74.6 ab         71.6 abc         31.4 ab         37.6 ab         10000 abc           Noncose1-08-270         12071 bbc         1000 abc         17.8 abc         20.7 bbc         20.7 bbc         20.7 bbc         20.7 bbc         1000 abc           Noncose1-0         12071 bbc         1000 abc         17.8 abc         40.8 bbc         20.0 bbc         20.1 bbc								
Noncease1-7         13051 ab         103         bod         772.6 dbc         response         20.5 bc         3875 bc         1060 dbc         1060 dbc           Noncease1-6         13050 db         1070 bc         1080 dbc         1071 bc         1070 bc         1070 bc         1070 bc         1070 bc         1077 bc         1070 bc		13856 ab	1.08 ab	75.8 a	76.1 ab			
Namparelish         12070         bod         10.8         abor         74.2         abor         60.5         abor         10.7         boc         10077         abor         10076         abor         2006         20.0         abor         2015         abor         2015         abor         2015         abor         2015         abor         2016         abor         2017         abor         2017         abor         2016         abor         2017         abor         2016         abor         2016         abor         2017         abor         2016         abor         2016 <th< td=""><td>Nonpareil-3-8-2-70</td><td>13756 ab</td><td>1.04 bcd</td><td>74.6 ab</td><td>71.8 abc</td><td>31.4 ab</td><td>3798 ab</td><td>10905 abc</td></th<>	Nonpareil-3-8-2-70	13756 ab	1.04 bcd	74.6 ab	71.8 abc	31.4 ab	3798 ab	10905 abc
Namparelish         12070         bod         10.8         abor         74.2         abor         60.5         abor         10.7         boc         10077         abor         10076         abor         2006         20.0         abor         2015         abor         2015         abor         2015         abor         2015         abor         2016         abor         2017         abor         2017         abor         2016         abor         2017         abor         2016         abor         2016         abor         2017         abor         2016         abor         2016 <th< td=""><td>Nonpareil-7</td><td>13051 ab</td><td>1.03 bcd</td><td>72.6 abc</td><td></td><td>29.5 bc</td><td>3571 bc</td><td>10606 abc</td></th<>	Nonpareil-7	13051 ab	1.03 bcd	72.6 abc		29.5 bc	3571 bc	10606 abc
Nampanelio         1365 ab.         1.02         bod         71.2         cd         66.9         abcd         30.2 abc         30.61         abcd         11.103         bcc           Winter         4343         af         0.05         bods         61.6         op         63.8         bods         20.0         op         391.3         bcc         895.6         cd         63.6         bods         20.0         op         242.2         op         894.4         as         63.8         bods         64.8         bods         64.8         bods         64.8         bods         64.8         as         242.2         as         844.4         as         84.4         as         84.4         bods         75.2         cd         dt         77.7         as         77.8         21.2         de         78.6         77.8         7.8         7.7         as         77.8         7.8         77.8         7.8					68.5 abod			
Nampanella         12803 abc         1.04 bod         71.6 bod         63.4 bods         20.0 bc         20.3 bc         20.8 bc								
Writers         9434         ef         0.96         both         61.6         g         63.8         both         20.0         e         2415         e         9256         det           Chigs         0771         of         0.33         def         53.8         de         20.0         de         2452         e         8144         e           Chigs         0.35         def         7.3         abc         67.9         de         240.0         de         2402         e         8144         e           Koch         723.2         0         1.17         B         685.0         de         1.87.7         e         220.0         6955           2010         Arcrage terrel wrig0         Stelling         percentage         mit         Tree         Accra         220.9         e         6955           2010         All abcold         72.3 abc         48.7         a         38.4         31.1         1.4560.4         1.45         48.7         3.45         3.45         1.45         1.45         1.45         1.45         1.45         1.45         1.45         1.45         1.45         1.45         1.45         1.45         1.45         1.45								
Kahl         11036         cde         0.87         of         50.1         p         79.2         a         21.1         de         250.0         de         851.3         c           Sweetheart         12799 abc         0.85         of         73.3         bc         55.0         de         240.0         de         255.0         de         77.6         21.2         de         255.0         de         77.7         7         7         21.2         de         255.0         de         77.7         7 </td <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>								
Chips         9771         off         0.93         off         53.8         off         67.3         abc         50.6         cole         242.2         e         814.4 <th< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></th<>								
Sweetheart         1278 abc         0.65         et         73.3 abc         98.6 ceta         24.0 d         2806 d         7865 d         776 d         21.2 de         2806 d         7865 d           Kochi         7252 g         1.17 abc         65.5 b         0         52.6 c         16.7 e         2259 e         6555           2010         No.5 or nutrivree         verrage kernel         Shelling         unit PAR int.         Tree         Acce         visition         14558 a           Norparei-Neco         9423 acc         1.24 abcdef         72.5 ab         40.7 a         25.0 a         3141 a         14558 a           Norparei-Neco         9423 acc         1.24 abcdef         72.3 ab         47.1 ab         24.9 a         3011 a         10916 ab           Norparei-Neco         1058 abcd         1.18 abcdf         71.0 ab         44.7 ab         24.9 a         3011 a         10916 ab           Norparei-Neco         1050 abcd         1.18 abcdf         70.4 abcd f <sup>2.5</sup> a         2002 a         11916 ab         12916 ab           Norparei-Neco         1.11 bocdf         56.1 abc         44.4 ab         27.1 a         2020 a         11916 ab           Norparei-Neco         1.11 bocdf         56.1 abc         44.8 abc	Kahl	11035 cde	0.87 ef	59.1 g	79.2 a	21.1 de	2559 de	8513 ef
Sweetheart         1278 abc         0.85         ef         73.3 abc         93.6 colo         24.0 d         200.6 d         7765         1765           Kochi         7252 g         g         1.17 abc         68.5 b         67.7 a         21.2 de         255.9 b         77.7 a         21.2 de         255.9 b         655.5           2010         No. on unif/ree         Average kernel         Shelling         5helling         mit PAR int.         Tree         Acce         yidd (bacce)         yidd (bacce)         yidd (bacce)         14558 a         14528 a         14558 a         14558 a         14558 a         14558 a         14558 a         1314 a         14558 a         13916 ab         1528 abcd         71.0 ab         440.7 a         25.9 a         2308 a         13916 ab         13916 ab <t< td=""><td>Chips</td><td>9771 ef</td><td>0.93 def</td><td>58.6 g</td><td>55.9 de</td><td>20.0 e</td><td>2422 e</td><td>8144 ef</td></t<>	Chips	9771 ef	0.93 def	58.6 g	55.9 de	20.0 e	2422 e	8144 ef
Maccona         9977         fg         1.07         abs         23.5         h         77.7         abs         21.2         de         2562         de         7563           Kochi         7252         g         1.17         a         68.5         abs         77.7         abs         21.2         abs         2259         de         6655           Variaty         No. of nutbree         wt (g)         Shelling parcentage         Kernel pounds per- unit BAE int.         Trace         Acron         Cumulative kernel yield (BaScaro)           Nonpareli-Newell         3521 abs         1.33 ab         7.3 ab         47.7 ab         24.2 ab         24.9 a         2311 a         11997 ab           Nonpareli-Drev         3888 cos         1.23 abcd         77.3 ab         46.2 abc         22.6 a         2349 a         13916 ab           Nonpareli-Drev         3888 cos         1.24 abcds         77.1 ab         46.4 ab         23.6 a         235.9 a         31.3 a         13720 bb           Nonpareli-Drev         3888 cos         1.22 abcd         77.3 ab         40.8 ab         22.5 a         33.3 a         13720 bb           Nonpareli-Drev         3888 cos         1.22 abcd         77.8 ab         30.8 boch         22.		12798 abc	0.85 ef		59.6 cde	24.0 d		
Kochi         7252         g         1.17         a         68.9         de         52.6         e         18.7         e         2259         e         6685           Variety         No. of nuttree         Average kernel wt (g)         Shelling percentage         Kernel pounds per unit PAR int.         Tree         Acre         Cumulative kernel yield (B#acre)           Nonparell-Newdi         0.502 do         1.31 ab         73.8 a         462 abc         22.8 a         231 a         14258 a           Nonparell-Newdi         3898 c.dc         1.13 ab.dc         77.8 ab         462 abc         22.8 a         231 a         14258 a           Nonparell-Newdi         3949 abc         1.24 abcd         77.8 ab         50.8 a         22.8 a         331 a         13270 abc           Nonparell-S         9440 abc         1.24 abcd         77.8 ab         28.5 a         330 a         13270 abc           Crise         6653 edg         1.10 bcdd         76.8 a         84.8 bcd         12.0 bc         1320 b         1320 b           Verigeria-Lowei         0.80 bcd         71.8 ab         48.8 bcd         16.8 a         20.6 b         20.7 a         1269 b         1269 b         1269 b         1269 b         1269 b         1269 b								
Carloy         No. of nutwiree         Average kernel wrigy         Shelling percentage         Kernel pounds per unit PAR int.         Tree         Accres         Cumulative kernel yield (bbacch)           Non-parell-Nuco         0651 abc         1.24 abcdel         72.5 ab         49.7 a         25.9 a         314 a         14593 a           Non-parell-Nuco         0622 bbd         1.24 abcdel         77.5 a         46.2 abc         23.6 a         3011 a         13916 ab           Non-parell-Shuco         1.24 abcdel         77.3 ab         46.2 abc         23.6 a         3300 a         13916 ab           Nonparell-Shuco         1.24 abcdel         77.8 ab         46.7 ab         25.5 a         3001 a         13920 bc           Nonparell-Shuco         1.24 abcdel         77.8 ab         44.8 rab         25.5 a         3001 a         13920 bc           Nonparell-Shuco         1.24 abcdel         70.9 ab         44.8 rab         23.0 a         27.9 a         13900 bc           Nonparell-Shuco         1.92 abcdel         70.9 ab         44.2 abcd         14.4 a         23.0 a         27.9 a         10933 dc           Arrow         79.0 ab         6.2 abc         23.6 a         10.4 b         20.6 b         10.933 dc           Nonparel-Nuco								
Variety         No. of nuts/ree         Average kernel (1.24 abcdel)         Shelling percentage         unit PA int         Tree         Acre         Cumulative kernel (148 acs)           Norsparell-Neco         0521 abc         1.24 abcdel         72.5 ab         48.7 a         25.9 a         3141 a         14625 abc           Norsparell-Sey 270         8823 bcd         1.28 abcd         77.3 ab         47.1 ab         24.0 a         3011 a         13911 ab           Norsparell-Sey 270         8823 bcd         1.28 abcd         77.3 ab         47.1 ab         24.0 a         3011 a         13916 ab           Norsparell-Sey 270         8823 bcd         1.24 abcde         72.3 ab         60.6 a         25.6 a         3050 a         13970 ab           Norsparell-Sey 270         8815 cde         1.23 abcdel         77.8 ab         48.7 ab         25.6 a         3050 a         13920 b           2456         6033 efg         1.10 bcdel         66.7 abc         148.4 a         25.0 a         2789 a         10823 d           Wirters         6601 efg         1.11 bcdel         66.7 abc         38.4 bcde         16.0 bc         19824 d         10823 d           Wirters         6601 efg         0.80         77.8 ab         42.2 abcd         23.4 a	Kochi	7252 g	1.17 a	68.9 de	52.6 6	18.7 e	2259 e	6955
Variety         No. of nuts/ree         Average kernel (1.24 abcdel)         Shelling percentage         unit PA int         Tree         Acre         Cumulative kernel (148 acs)           Norsparell-Neco         0521 abc         1.24 abcdel         72.5 ab         48.7 a         25.9 a         3141 a         14625 abc           Norsparell-Sey 270         8823 bcd         1.28 abcd         77.3 ab         47.1 ab         24.0 a         3011 a         13911 ab           Norsparell-Sey 270         8823 bcd         1.28 abcd         77.3 ab         47.1 ab         24.0 a         3011 a         13916 ab           Norsparell-Sey 270         8823 bcd         1.24 abcde         72.3 ab         60.6 a         25.6 a         3050 a         13970 ab           Norsparell-Sey 270         8815 cde         1.23 abcdel         77.8 ab         48.7 ab         25.6 a         3050 a         13920 b           2456         6033 efg         1.10 bcdel         66.7 abc         148.4 a         25.0 a         2789 a         10823 d           Wirters         6601 efg         1.11 bcdel         66.7 abc         38.4 bcde         16.0 bc         19824 d         10823 d           Wirters         6601 efg         0.80         77.8 ab         42.2 abcd         23.4 a								
Variety         No. of nuts/ree         Average kernel (1.24 abcdel)         Shelling percentage         unit PA int         Tree         Acre         Cumulative kernel (148 acs)           Norsparell-Neco         0521 abc         1.24 abcdel         72.5 ab         48.7 a         25.9 a         3141 a         14625 abc           Norsparell-Sey 270         8823 bcd         1.28 abcd         77.3 ab         47.1 ab         24.0 a         3011 a         13911 ab           Norsparell-Sey 270         8823 bcd         1.28 abcd         77.3 ab         47.1 ab         24.0 a         3011 a         13916 ab           Norsparell-Sey 270         8823 bcd         1.24 abcde         72.3 ab         60.6 a         25.6 a         3050 a         13970 ab           Norsparell-Sey 270         8815 cde         1.23 abcdel         77.8 ab         48.7 ab         25.6 a         3050 a         13920 b           2456         6033 efg         1.10 bcdel         66.7 abc         148.4 a         25.0 a         2789 a         10823 d           Wirters         6601 efg         1.11 bcdel         66.7 abc         38.4 bcde         16.0 bc         19824 d         10823 d           Wirters         6601 efg         0.80         77.8 ab         42.2 abcd         23.4 a	2010					Cernel nounds per		
Variesy         No. of nuts/tree         vt (g)         percentage         unit PAR int.         Tree         Acce         yjeld (bbácc)           Nonparali-Nevell         8429         cde         1.31 ab         73.6 a         45.2 abc         25.9 a         3141 a         14558 a           Nonparali-Nevell         8429         cde         1.31 ab         73.6 a         45.2 abc         24.8 a         2931 a         14022 ab           Nonparali-Nevell         8429         cde         1.38 abcd         77.0 ab         45.2 abc         23.6 a         2849 a         13911 ab           Nonparali-Nover         8586         cde         1.28 abcd         77.0 ab         44.2 abc         23.6 a         3150 ab         13010 ab         13010 ab           Nonparali-Nove         8631         cde         1.24 abcdet         70.3 ab         4.04 a         2020 bc         13100 bc           Nonparali-Nove         8631         cde         1.15 bcdet         6532 dbc         44.4 a         20.0 a         2789 a         11923 d           Nonparali-Nove         908 abc         1.15 bcdet         6524 abc         23.8 bcd         14.4 bc         1283 dbc         16561 d           Nonparali-Nove         1.03 abc         70.8 abc			Average kernel	Shelling		tornor poundo por		Cumulative kernel
Nonpareli-Neor         09521 abc         1.24 abcdef         72.5 ab         40.7 ra         25.9 ab         3141 ra         14568 ab           Nonpareli-Neor         8422 ocde         1.31 ab         7.3 ab         47.1 ab         24.9 a         3011 a         13916 ab           Nonpareli-Neor         8368 ocde         1.28 abcd         7.3 ab         47.1 ab         24.9 a         3011 a         13916 ab           Nonpareli-Neor         8368 ocde         1.28 abcd         7.0 ab         46.2 abc         23.6 a         22849 a         13911 ab         13916 ab           Nonpareli-Neor         9410 abc         1.24 abcdef         77.3 ab         50.8 a         25.5 a         3081 a         13220 bc           Arappareli-Neor         8135 ode         1.24 abcdef         77.3 ab         48.7 ab         22.70 ab         12793 ab         13903 ab           Sweetheat         1091 fo         0.80         1.15 boddf         70.8 ab         48.4 ab         23.0 bc         22.78 ab         19933 d           Sweetheat         1091 fo         0.80         71.8 ab         42.2 abcd         23.0 bc         19904 db         19933 d           Sweetheat         1091 fo         1.65 db         43.4 abcd         16.0 b         82.1 be	Variatio				unit DAD int	Tech	A	
Nonpareil-8-exit         8420         cde         1.31 ab         7.8 a         44.2 abc         24.2 a         2931 a         14022 ab           Nonpareil-3-Correr         8828         cde         1.28 abcd         7.2 a ab         47.1 ab         24.9 a         3011 a         13916 ab           Nonpareil-7         10612 ab         1.16 bcdef         69.8 ab         49.4 a         27.1 a         2822 a         13916 ab           Nonpareil-6         9449 abc         1.24 abcde         77.3 ab         49.4 a         27.1 a         2822 a         13916 ab           Nonpareil-6         9449 abc         1.24 abcde         77.8 ab         48.7 ab         25.5 a         30081 a         13720 abc           21.9e         6653 abc         66.1 abc         149.4 bc         1203 bc         13130 bc         1320 bc         13130 bc           Vinters         6601 edg         1.11 bcdef         60.7 abc         48.4 a         23.0 a         2798 a         1008.3 d           Sweetheat         1.9915 a         0.80         71.8 ab         44.2 abcd         24.4 abcd         24.6 abcd         24.6 a         28.2 a         109.3 d           Sweetheat         1.9917 ab         1.16 bcd         60.2 abc         71.8 ab         44.								
Nonpareli-0-2-70         B823         bcd         1.28 abcd         72.3 ab         47.1 ab         24.9 a         3011 a         13916 ab           Nonpareli-7         10612 ab         1.28 abcd         71.0 ab         46.2 abc         23.6 a         284.9 a         13916 ab           Nonpareli-7         10612 ab         1.16 bcdef         68.8 ab         49.4 a         27.1 a         3282 a         13916 ab           Nonpareli-6         9499 abc         1.24 abcdef         77.3 ab         46.7 ab         25.8 a         3130 a         13708 abc           Arropareli-Acres         8315         cde         1.24 abcdef         77.0 ab         43.4 abc         22.0 bc         1320 bc         1320 bc           Arropareli-Acres         8315         cde         1.22 bc         43.4 abc         22.4 a         22.8 p a         1280 d         1280 d           Arropareli-Acres         0.01         65.5 de         43.4 bcd         169 b         22.4 a         9306 d         160 b         160 b         22.8 p a         10605 d         1605 d         1605 d         162 b         168 b         22.4 a         10605 d         160 b         160 b <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>								
Nonpareli-Driver         8388         cde         1.28         decd         71.0         abcd         42.2         abcd         12.8         abcd         13.9         13.9         13.9         13.9         13.9         13.0         abcd	Nonpareil-Newell	8429 cde	1.31 ab	73.6 a		24.2 a	2931 a	14022 ab
Nonpareli-Driver         8388         cde         1.28         decd         71.0         abcd         42.2         abcd         12.8         abcd         13.9         13.9         13.9         13.9         13.9         13.0         abcd	Nonpareil-3-8-2-70	8823 bcd	1.28 abcd	72.3 ab	47.1 ab	24.9 a	3011 a	13916 ab
Nonpareil-7         10612 ab         1.16 bodef         608 ab         49.4 a         27.1 a         3282 a         13916 ab           Nonpareil-6         9493 abc         1.24 abcdef         77.3 ab         50.8 a         25.8 a         3130 ab         13270 abc           2199         6633 efg         1.10 bcdef         70.9 ab         43.8 abc         22.6 a         2020 b         1320 bc           Nonpareil-Some         8315 cde         1.12 bcdef         60.7 cde         38.5 bcd         16.0 bc         120 bcd         120 bcd           Writers         6601 efg         1.11 bcdef         60.7 cde         38.5 bcd         16.0 bc         1945 bc         10033 d           Writers         0808 abc         1.15 bcdef         65.5 de         43.4 abcd         23.0 a         2789 a         10033 d           Karli         7587 cde         1.01 66.5 de         43.4 abcd         12.1 bc         1466 bc         6421 e           Variacy         No. of nuts/tree         Average kernel         y         36.7 cde         14.1 0.a         42.2 abcd         31.4 a         10.8 abc         105523 a           Nonpareil-New         18776 abc         1.00 bcd         70.7 a         79.5 ab         41.0 a         4464 a         19523 a<								
Nonparelis         9410 abc         1.24 abcde         77.3 ab         50.8 a         25.8 a         3130 a         13708 abc           2-19e         6833 efg         1.12 abcdef         56.1 e         33.7 def         15.7 bc         220 bc         13100 bc           Nonpareli-Jone         8815 cde         1.23 abcdef         70.9 ab         43.8 abc         22.6 a         27.37 a         12201 bc           Winters         6601 efg         1.11 bcdef         60.7 cde         38.5 bcde         16.0 bc         1945 bc         11203 d           Sweetheart         10915 a         0.80         71.8 ab         42.2 abcd         23.4 a         2839 a         10804 d           Sweetheart         10915 a         0.80         71.8 ab         42.2 abcd         14.4 bc         1745 bc         9308 e           Kschi         3902 h         1.40 a         64.4 bcd         23.5 c         12.1 bc         1466 bc         8421 e           Varity         No. of nut/itree         rtt db         70.7 a         75.6 b         41.0 a         4954 a         1953 a           Nonpareli-Nevc         1774 abc         1.05 bc         70.7 ab         73.6 b         41.0 a         4954 a         19578 ab           Nonpareli-Nevc								
Nonpareli-lic         9499 abc         1.11 abcdef         71.8 abcdef         71.8 abcdef         71.8 abcdef         71.8 abcdef         71.8 abcdef         92.6 a         3031 a         13220 bc           Nonpareli-Jones         8515 cde         1.23 abcdef         70.9 ab         43.8 abc         22.6 a         2737 a         12681 bc           Winters         6601 ofg         1.11 bcdef         66.7 cde         38.5 bcde         16.0 b         1945 bc         11203 d           Sweetheant         10915 a         0.80         71.6 ab         42.2 4bcd         23.4 a         2339 a         10933 d           Marcona         5073 gh         1.28 abc         26.5 de         43.4 abcd         16.9 b         2048 c         10561 d           Marcona         5073 gh         1.28 abc         26.5 de         33.7 cdef         14.4 bc         1466 bc         142.1 bc         1466 bc         8421 e           2011         Varage kerrel         ymprentise         ymprentise         90.1 a         41.0 a         4964 a         19523 a           Nonpareli-Nuew         19770 abc         1.00 bcd         70.7 a         79.5 ab         41.0 a         4962 a         19878 abc           Nonpareli-Nuew         1774 abc         0.39 bcde								
2-19e         6833         efg         1.10         bcde         56.1         e         33.7         def         16.7         bc         2020         bc         13100         bc           Winters         6601         efg         1.11         bcdef         60.7         cde         38.5         bcde         12.8         bcdef         1003.3         d         1203.3         d         1203.3         d         1203.3         d         1203.4         23.4         23.4         23.9         a         1003.4         d								
Nongareil-Jones         8315         cde         1.13         bddef         6601         eff         22.6 a         27.37 a         12891 c           Chips         9088 abc         1.11 bddef         667. cde         38.5 bcde         160. bc         1945 bc         111203 d           Sweetheart         19015 a         0.80         71.8 ab         42.2 abcd         23.4 a         2839 a         10393 d           Kahl         7587 cde         1.01         56.5 de         43.4 abcd         16.9 b         2048 c         10561 d           Marcona         5073 gh         1.28 abc         26.2 g         36.7 cdef         14.4 bc         1745 bc         9302 e           2011         No. of nuts/tree         wt(g)         Shelling         percentage         unit PAR int.         Tree         Accre         (bbs/acc)           Nonpareil-Neco         18776 a         0.99 bcde         66.0 abc         90.1 a         41.0 a         4664 a         19523 a           Nonpareil-Neco         18774 abc         1.05 bc         70.7 a         79.8 ab         31.4 a         4365 a         18673 abc           Nonpareil-Neco         19744 abc         1.03 bc         70.1 ab         70.4 ab         38.7 a         4468 a <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>								
Winters         6601         effor         11.1         bode         60.7         c.de         13.6         bode         64.4         a         23.0         a         2789         a         11033         d           Sweetheart         10915         a         0.80         71.8         abc         44.2         abcd         16.9         b         2234         a         2839         a         10804         d           Kahl         758.7         cde         1.01         56.5         de         43.4         abcd         16.9         b         2048         c         10561         d           Marcona         59073         gh         1.28         abc         26.2         g         36.7         cdf         14.4         bc         1466         bc         89.0         89.0         89.0         89.0         23.5         c         12.1         bc         b         89.0         B         Bode         68.0         80.1         a         410.0         4962.a         18878         Bo         18878         Bo         Bo         19523.a         18878         Bo         1963.3         Bo         189.0         1952.3         Bo         14.10.a         4962.	2-19e	6833 efg	1.10 bcdef	56.1 e	33.7 def	16.7 bc	2020 bc	13100 bc
Winters         6601         effor         11.1         bode         60.7         c.de         13.6         bode         64.4         a         23.0         a         2789         a         11033         d           Sweetheart         10915         a         0.80         71.8         abc         44.2         abcd         16.9         b         2234         a         2839         a         10804         d           Kahl         758.7         cde         1.01         56.5         de         43.4         abcd         16.9         b         2048         c         10561         d           Marcona         59073         gh         1.28         abc         26.2         g         36.7         cdf         14.4         bc         1466         bc         89.0         89.0         89.0         89.0         23.5         c         12.1         bc         b         89.0         B         Bode         68.0         80.1         a         410.0         4962.a         18878         Bo         18878         Bo         Bo         19523.a         18878         Bo         1963.3         Bo         189.0         1952.3         Bo         14.10.a         4962.	Nonpareil-Jones	8315 cde	1.23 abcdef	70.9 ab	43.8 abc	22.6 a	2737 a	12691 c
Chips         9088 abc         11.15         bodef         65.9 abc         48.4 a         23.0 a         2789 a         10933 d           Kahl         7957 cde         0.80         71.8 ab         42.2 abcd         23.4 a         2839 a         10804 d           Kahl         7957 cde         1.01         56.5 de         43.4 abcd         16.9 b         2048 c         10804 d           Marcona         5073 gh         1.28 abc         28.2 g         3.6 rodef         14.4 bc         1745 bc         9302 e           2011         No. of nuts/tree         wt(g)         Shelling percentage         unit PAR int.         Tree         Acre         Cumulative karrel (bbs/acr)           Nonpareli-Nece         18776 a         0.99 bcde         66.0 abc         70.7 a         79.6 ab         41.0 a         4964 a         19523 a           Nonpareli-Nece         17793 abc         1.00 bcd         70.1 ab         72.4 ab         38.7 a         4663 a         18593 abc           Nonpareli-Nece         17744 abc         1.03 bc         70.4 ab         72.4 ab         38.7 a         4468 a         18676 abc         18776 ab           Nonpareli-Nece         17978 abc         0.98 bcde         60.2 abc         72.4 ab         38.7 a								
Sweetheart         10915 a         0.80         71.8 ab         42.2 abcd         23.4 a         283 a         10804 d           Kahl         7587 cde         1.01         56.5 de         43.4 abcd         16.9 b         2048 c         10561 d           Marcona         5073 gh         1.28 abc         26.2 g         36.7 cdef         14.4 bc         1745 bc         9308 e           2011         No. of nuts/tree         Average kernel         wit (g)         Shelling         percentage         unit PAR int.         Tree         Acree         (bs/acre)           Nonpareil-Nico         18776 a         0.99 bcde         68.0 abc         90.1 a         41.0 a         4964 a         19823 a           Nonpareil-Nico         18776 a         1.05 bc         70.7 a         79.5 ab         31.4 a         4455 a         18878 ab           Nonpareil-S         1.7074 abc         0.83 bcde         68.2 abc         72.8 ab         33.1 a         4455 a         18593 abc           Nonpareil-S         1574 de         1.03 bc         70.4 ab         70.2 abc         35.9 a         4342 a         18050 bcd           Nonpareil-S         1574 de         1.03 bc         70.4 ab         70.2 abc         35.9 a         4342 a         1								
Kahl         7587         cde         1.01         56.5         de         43.4         abcd         16.9         b         2048         c.         10561         d           Kachi         3902         h         1.40         ab         26.2         g         36.7         cdef         14.4         bc         1745         bc         9030         e           Kachi         3902         h         1.40         ab         64.4         bcd         23.5         g         12.1         bc         1745         bc         9030         e           Variety         No. of nuts/tree         wtr (g)         percentage         unit PAR int.         Tree         Acree         Cumulative kernel joid           Nonparell-Nevell         17790         abc         10.0         bc         70.1         77.4         79.5         ab         31.4         a         4962 a         18952 a         18952 a         18957 abc         18953 abc         118950 cdc         14933 abc								
Marcona         5073         gh         1.28 abc         28.2         g         36.7         cdel         14.4         bc         1745         bc         9308         e           Kachi         3902         h         1.40 a         64.4         bcd         23.5         cdel         12.1         bc         1446         bc         8421         e           2011         No. of nuts/tree         wt(g)         Shelling percentage         mit PA int.         Tree         Acree         Cumulative (bs/acre)           Nonparell-Xoco         1776 a         0.99 bcde         68.0 abc         90.1 a         41.0 a         4962 a         1857 ab           Nonparell-Xoco         1774 abc         1.05 bc         70.7 a         79.5 ab         41.0 a         4962 a         1857 ab           Nonparell-Xone         1793 ab         0.98 bcde         68.0 abcd         72.8 ab         38.4 a         4683 a         18593 abc           Nonparell-Xone         16744         de         1.03 bc         70.4 ab         70.2 abc         35.9 a         4342 a         18050 bcd           Nonparell-Xones         16993 abcd         0.96 bcde         70.0 ab         70.2 abc         35.9 a         4362 a         17056 bcd         <	-							
Kochi         3902         h         1.40 a         64.4 bcd         23.5         c         12.1 bc         1466 bc         8421 e           2011         No. of nuts/tree         Average kernel wt (g)         Shelling percentage         Kernel pounds per         Cumulative kernel yield           Nonparell-Nico         18776 a         0.99 bcde         68.0 abc         90.1 a         41.0 a         4964 a         19523 a           Nonparell-Nevell         1.7790 abc         1.00 bcd         70.7 a         79.5 ab         41.0 a         4964 a         19523 a           Nonparell-Nevell         17793 abcd         0.88 bcd         66.0 abcd         72.8 ab         38.7 a         4663 a         18767 abc           Nonparell-Nevell         19630 bcde         1.04 bc         70.4 ab         70.2 abc         35.9 a         4342 a         18050 bcd           Nonparell-Jones         18993 abcd         0.96 bcde         70.0 ab         74.7 ab         38.2 a         4619 a         17783 bcd         17781 db         147750 d         28.6 a         4450 a         177580 cd           Nonparell-Jones         18993 abcd         0.96 bcde         70.0 ab         70.0 ab         38.6 a         44619 a         17051 db         14215 e           Vinters <td>Kahl</td> <td>7587 cde</td> <td>1.01</td> <td>56.5 de</td> <td>43.4 abcd</td> <td>16.9 b</td> <td>2048 c</td> <td>10561 d</td>	Kahl	7587 cde	1.01	56.5 de	43.4 abcd	16.9 b	2048 c	10561 d
2011         Average kernel Variety         Average kernel Wt (g)         Shelling percentage         Kernel pounds per unit PAR int.         Cumulative kernel yield (lbs/acre)           Nonparell-Nec         18776 a         0.99 bocke         68.0 abc         90.1 a         41.0 a         4962 a         19523 a           Nonparell-Nec         17744 abc         1.05 bc         70.7 a         79.5 ab         41.0 a         4962 a         18876 ab           Nonparell-Newel         1799 abc         0.99 bocde         66.0 abcd         72.8 ab         38.7 a         4683 a         18878 ab           Nonparell-Newel         1797 ab         0.99 bocde         66.0 abcd         72.8 ab         38.7 a         4683 a         18593 abc           Nonparell-Stripp ade/         16630 bode         1.04 bc         70.0 ab         70.2 abc         35.9 a         4469 a         17338 bcd           2-19e         18253 ab         0.91 bcde         64.8 abcd         65.2 bcd         36.0 a         4360 a         17765 c           Nonparell-Jones         16993 abcd         0.98 bcde         70.0 abc         36.0 a         4360 a         17756 c         d           Nonparell-Jones         16993 abcd         0.98 bcde         65.3 c         42.4 bcd         2925 bcd         131	Marcona	5073 gh	1.28 abc	26.2 g	36.7 cdef	14.4 bc	1745 bc	9308 e
2011         Average kernel Variety         Average kernel Wt (g)         Shelling percentage         Kernel pounds per unit PAR int.         Cumulative kernel yield (lbs/acre)           Nonparell-Nec         18776 a         0.99 bocke         68.0 abc         90.1 a         41.0 a         4962 a         19523 a           Nonparell-Nec         17744 abc         1.05 bc         70.7 a         79.5 ab         41.0 a         4962 a         18876 ab           Nonparell-Newel         1799 abc         0.99 bocde         66.0 abcd         72.8 ab         38.7 a         4683 a         18878 ab           Nonparell-Newel         1797 ab         0.99 bocde         66.0 abcd         72.8 ab         38.7 a         4683 a         18593 abc           Nonparell-Stripp ade/         16630 bode         1.04 bc         70.0 ab         70.2 abc         35.9 a         4469 a         17338 bcd           2-19e         18253 ab         0.91 bcde         64.8 abcd         65.2 bcd         36.0 a         4360 a         17765 c           Nonparell-Jones         16993 abcd         0.98 bcde         70.0 abc         36.0 a         4360 a         17756 c         d           Nonparell-Jones         16993 abcd         0.98 bcde         65.3 c         42.4 bcd         2925 bcd         131	Kochi	3902 h	1.40 a	64.4 bcd	23.5 d	12.1 bc	1466 bc	8421 e
Variety         No. of nuts/tree         Average kernel wt (g)         Shelling percentage         Init PAR int.         Tree         Acre         Kernel yield (lbs/acre)           Variety         No. of nuts/tree         0.99 bcde         66.0 abc         90.1 a         41.0 a         4962 a         19523 a         19523 a           Nonpareil-Wewell         1779 obc         1.00 bcd         70.7 a         79.5 ab         41.0 a         4962 a         19578 ab         19573 ab           Nonpareil-Wewell         1779 obc         0.98 bcde         66.0 abcd         72.3 ab         38.7 a         4683 a         19593 abc           Nonpareil-Forier         17078 abcd         0.83 e         69.2 abc         72.3 ab         38.7 a         4683 a         19505 bcd           Nonpareil-Forier         16630 bcde         1.04 bc         70.0 ab         74.7 ab         38.2 a         4619 a         17538 bcd           2:19e         18253 ab         0.91 bcde         64.8 abcd         65.2 bcd         36.0 a         4460 a         1756 d           Winters         11997 cde         0.86 de         64.1 bcde         47.3 cde         28.7 bcd         342.6 bd         13554 b         14215 e           Kahl         14240 f         0.94 bcde         60.3 d								
Variety         No. of nuts/tree         Average kernel wt (g)         Shelling percentage         Init PAR int.         Tree         Acre         Kernel yield (lbs/acre)           Variety         No. of nuts/tree         0.99 bcde         66.0 abc         90.1 a         41.0 a         4962 a         19523 a         19523 a           Nonpareil-Wewell         1779 obc         1.00 bcd         70.7 a         79.5 ab         41.0 a         4962 a         19578 ab         19573 ab           Nonpareil-Wewell         1779 obc         0.98 bcde         66.0 abcd         72.3 ab         38.7 a         4683 a         19593 abc           Nonpareil-Forier         17078 abcd         0.83 e         69.2 abc         72.3 ab         38.7 a         4683 a         19505 bcd           Nonpareil-Forier         16630 bcde         1.04 bc         70.0 ab         74.7 ab         38.2 a         4619 a         17538 bcd           2:19e         18253 ab         0.91 bcde         64.8 abcd         65.2 bcd         36.0 a         4460 a         1756 d           Winters         11997 cde         0.86 de         64.1 bcde         47.3 cde         28.7 bcd         342.6 bd         13554 b         14215 e           Kahl         14240 f         0.94 bcde         60.3 d								
Variety         No. of nutsfree         Verage kernel         Shelling percentage         unit PAR Int.         Tree         Acre         kernel yield (Ib/3cre)           Nonparell-Neco         18776 a         0.99 bcde         68.0 abc         90.1 a         41.0 a         4964 a         19523 a           Nonparell-Newell         1774 abc         1.06 bc         70.7 a         79.5 ab         411.0 a         4964 a         19523 a           Nonparell-Newell         17743 abc         0.98 bcde         66.0 abcd         72.8 ab         38.7 a         4653 a         18767 abc           Nonparell-Threr         17078 abcd         0.88 c         69.2 abc         72.3 ab         31.4 a         4555 a         18443 abc           Nonparell-5         15744 de         1.03 bc         70.4 ab         70.2 abc         35.9 a         4342 a         18050 bcd           Nonparell-6         16530 bcde         1.04 bc         70.0 ab         70.0 abc         36.0 a         4360 a         17560 cd           Nonparell-6         16839 abcd         0.94 bcde         60.3 de         44.7 de         22.4 b         342.6 b         14757 e         62.6 b           Vinters         15979 cde         0.86 de         68.3 de         44.7 de         22.4 b								
Nonpareli-Nico         18776 a         0.99 bcde         68.0 abc         90.1 a         41.0 a         4964 a         19523 a           Nonpareli-Se-2-70         17744 abc         1.05 bc         70.7 a         79.5 ab         41.0 a         4964 a         1876 ab           Nonpareli-Mewell         17790 abc         0.00 bcd         70.1 ab         69.4 abc         39.2 a         4745 a         1876 ab           Nonpareli-Toriver         1794 abc         0.88 bcde         66.0 abcd         72.8 ab         33.7 a         4868 a         18593 abc           Nonpareli-Foriver         15744 de         1.03 bc         70.4 ab         70.2 abc         35.9 a         4342 a         18050 bcd           Nonpareli-Forier         16530 bcde         1.04 bc         70.0 ab         74.7 ab         38.2 a         4619 a         17838 bcd           Nonpareli-Forier         16933 abcd         0.96 bcde         70.0 ab         70.0 abc         36.6 a         4460 a         17560 cd           Vinters         15979 cde         0.83 e         63.7 ef         56.8 cde         29.4 b         3554 b         14215         e           Kinters         1993 abcd         0.96 bcde         63.3 ef         45.6 de         24.4 bcd         2985 bcd	2011				ŀ	Kernel pounds per		
Nonpareli-3e-2-70         1774 abc         1.05 bc         70.7 a         79.5 ab         41.0 a         4462 a         18878 ab           Nonpareli-Newell         17790 abc         1.00 bcd         70.1 ab         69.4 abc         39.2 a         4745 a         18878 ab           Nonpareli-Tiver         17943 ab         0.98 bcde         68.0 abcd         72.8 ab         38.7 a         4683 a         18593 abc           Nonpareli-5         15744 de         1.03 bc         70.4 ab         70.2 abc         35.9 a         4342 a         18050 bod           Nonpareli-6         16630 bcde         1.04 bc         70.0 ab         74.7 ab         38.2 a         4619 a         1738 bcd         219e           Nonpareli-Jones         16993 abcd         0.96 bcde         70.0 ab         70.0 abc         36.0 a         4360 a         17051 d           Winters         115979 cde         0.83 e         58.7 ef         65.8 cde         29.4 b         3554 b         14215 e         e           Kahi         12420 f         0.86 de         64.1 bcde         44.7 de         24.7 bcd         2985 bcd         13918 e           Kahi         1220 f         0.86 de         63.5 cde         9.4 e         23.3 d         2746 d         12	2011		Average kernel	Shelling	ŀ	Kernel pounds per		
Nonpareli-3e-2-70         1774 abc         1.05 bc         70.7 a         79.5 ab         41.0 a         4462 a         18878 ab           Nonpareli-Newell         17790 abc         1.00 bcd         70.1 ab         69.4 abc         39.2 a         4745 a         18878 ab           Nonpareli-Tiver         17943 ab         0.98 bcde         68.0 abcd         72.8 ab         38.7 a         4683 a         18593 abc           Nonpareli-5         15744 de         1.03 bc         70.4 ab         70.2 abc         35.9 a         4342 a         18050 bod           Nonpareli-6         16630 bcde         1.04 bc         70.0 ab         74.7 ab         38.2 a         4619 a         1738 bcd         219e           Nonpareli-Jones         16993 abcd         0.96 bcde         70.0 ab         70.0 abc         36.0 a         4360 a         17051 d           Winters         115979 cde         0.83 e         58.7 ef         65.8 cde         29.4 b         3554 b         14215 e         e           Kahi         12420 f         0.86 de         64.1 bcde         44.7 de         24.7 bcd         2985 bcd         13918 e           Kahi         1220 f         0.86 de         63.5 cde         9.4 e         23.3 d         2746 d         12		No. of nuts/tree	-	-			Acre	kernel yield
Nonparell-Newell         17790 abc         1.00 bcd         70.1 ab         69.4 abc         39.2 a         4745 a         18767 abc           Nonparell-Driver         17943 ab         0.98 bcde         66.0 abcd         72.8 ab         38.7 a         4683 a         18993 abc           Nonparell-7         17078 abcd         0.83 e         68.2 abc         72.3 ab         31.4 a         4555 a         18443 abc           Nonparell-6         1653 bcde         1.04 bc         70.0 abc         77.4 ab         38.2 a         4619 a         17738 bcd           Nonparell-5         18593 abcd         0.96 bcde         70.0 abc         36.0 a         3460 a         17758 bcd         cd           Nonparell-Jones         16933 abcd         0.96 bcde         70.0 abc         70.0 abc         36.0 a         3460 a         17758 bcd         cd           Winters         15979 cde         0.83 e         58.7 ef         56.8 cde         28.4 bc         3354 b         14757 e         58.6 de         24.7 bcd         2985 bcd         13918 e         6           Kahl         12420 f         0.89 cde         53.5 f         45.6 de         24.7 bcd         2985 bcd         13514 e         6         39.4 e         23.3 d         2825 d         <	Variety		wt (g)	percentage	unit PAR int.	Tree		kernel yield (lbs/acre)
Nonpareil-Driver         17943 ab         0.98 bcde         66.0 abcd         72.8 ab         38.7 a         4683 a         18593 abc           Nonpareil-5         15744         de         1.03 bc         70.4 ab         72.3 ab         31.4 a         4555 a         18443 abc           Nonpareil-6         16630         bcde         1.04 bc         70.4 ab         70.2 abc         35.9 a         4619 a         17838         bcd           2-19e         18253 ab         0.91 bcde         64.8 abcd         65.2 bcd         36.8 a         44619 a         17050         cd           Nonpareil-Jones         16993 abcd         0.96 bcde         70.0 ab         74.7 ab         38.2 a         4619 a         17050         cd           Winters         15979         cde         0.83         e         58.7         ef         56.8         cde         29.4         b         3554         b         14757         e           Sweetheart         14969         e         0.86         64.1         bcde         47.3         cde         28.2         bcd         13914         e         44.1757         e         34.7         d         24.4         bcd         13914         e         14215         e <td><b>Variety</b> Nonpareil-Nico</td> <td>18776 a</td> <td>wt (g) 0.99 bcde</td> <td>percentage 68.0 abc</td> <td>unit PAR int. 90.1 a</td> <td><b>Tree</b> 41.0 a</td> <td>4964 a</td> <td><b>kernel yield</b> (Ibs/acre) 19523 a</td>	<b>Variety</b> Nonpareil-Nico	18776 a	wt (g) 0.99 bcde	percentage 68.0 abc	unit PAR int. 90.1 a	<b>Tree</b> 41.0 a	4964 a	<b>kernel yield</b> (Ibs/acre) 19523 a
Nonpareil-7         17078 abcd         0.83         e         69.2 abc         72.3 ab         31.4 a         4555 a         18443 abc           Nonpareil-6         1650 bcd         1.03 bc         70.4 ab         70.2 abc         35.9 a         4342 a         18050 bcd           Nonpareil-6         16630 bcde         1.04 bc         70.0 ab         74.7 ab         38.2 a         4619 a         17580 bcd           2-19e         18253 ab         0.91 bcde         64.8 abcd         65.2 bcd         36.8 a         4460 a         17560 cd           Nonpareil-Jones         15979 cde         0.83 e         58.7 ef         56.8 cde         29.4 b         3554 b         14757 e           Sweetheart         14969 e         0.86 de         64.1 bcde         47.3 cde         28.2 bc         3412 bc         14215 e           Kahl         12420 f         0.89 cde         53.5 f         45.6 de         24.7 bcd         2985 bcd         13918 e           Marcona         9633 g         1.07 b         30.8 c         45.0 de         22.7 d         2746 d         12054           Variety         No. of nuts/tree         wt (g)         percentage         percentage         unit PAR int.         Tree         Acre         (lb/scre) </td <td><b>Variety</b> Nonpareil-Nico Nonpareil-3-8-2-70</td> <td>18776 a 17744 abc</td> <td>wt (g) 0.99 bcde 1.05 bc</td> <td>percentage 68.0 abc 70.7 a</td> <td><b>unit PAR int.</b> 90.1 a 79.5 ab</td> <td><b>Tree</b> 41.0 a 41.0 a</td> <td>4964 a 4962 a</td> <td>kernel yield (lbs/acre) 19523 a 18878 ab</td>	<b>Variety</b> Nonpareil-Nico Nonpareil-3-8-2-70	18776 a 17744 abc	wt (g) 0.99 bcde 1.05 bc	percentage 68.0 abc 70.7 a	<b>unit PAR int.</b> 90.1 a 79.5 ab	<b>Tree</b> 41.0 a 41.0 a	4964 a 4962 a	kernel yield (lbs/acre) 19523 a 18878 ab
Nonpareil-5         15744         de         1.03 bc         70.4 ab         70.2 abc         35.9 a         4342 a         18050         bcd           Nonpareil-6         16630 bcde         1.04 bc         70.0 ab         74.7 ab         38.2 a         4619 a         17838 bcd           2-19e         18253 ab         0.91 bcde         64.8 abcd         65.2 bcd         36.6 a         4460 a         170560 cd           Nonpareil-Jones         16993 abcd         0.96 bcde         70.0 ab         70.0 abc         36.0 a         4360 a         17057 e         d           Sweetheart         14969         e         0.86 de         64.1 bcde         47.3 cde         28.2 bc         3412 bc         14215         e           Chips         11901 f         0.94 bcde         60.3 de         44.7 de         24.7 bcd         2985 bcd         13918         e           Kahl         12240 f         0.88 cde         55.5 f         45.6 de         24.7 bcd         2953 bcd         13154         e           Variety         No. of nuts/tree         Merage kernel         percentage         funit PAR int.         Tree         Acre         ((bs/acre)           Nonpareil-Newell         8606 b         1.13 de         67.7 bcd<	Variety Nonpareil-Nico Nonpareil-3-8-2-70 Nonpareil-Newell	18776 a 17744 abc 17790 abc	wt (g) 0.99 bcde 1.05 bc 1.00 bcd	percentage           68.0 abc           70.7 a           70.1 ab	unit PAR int. 90.1 a 79.5 ab 69.4 abc	Tree 41.0 a 41.0 a 39.2 a	4964 a 4962 a 4745 a	kernel yield (lbs/acre) 19523 a 18878 ab 18767 abc
Nonpareil-6         1630         bcde         1.04         bc         70.0 ab         74.7 ab         38.2 a         4619 a         17838         bcd           2-19e         18253 ab         0.91 bcde         64.8 abcd         65.2 bcd         36.8 a         4460 a         17560         cd           Nonpareil-Jones         16993 abcd         0.96 bcde         70.0 abc         70.0 abc         36.0 a         4360 a         17570         e           Sweetheart         14969         e         0.86         de         64.1 bcde         47.3 cde         28.2 bc         3412 bc         14215         e           Sweetheart         14969         e         0.86 de         63.3 de         45.0 de         28.2 bc         3412 bc         14215         e           Kahl         12420 f         0.89 cde         53.5 f         45.0 de         22.7 d         2746 d         12054           Kochi         8701 g         1.22 a         63.5 cde         9.4 c         23.3 d         2825 d         11247           Variety         No. of nuts/tree         wt (g)         percentage         unit PAR int.         Tree         Acree         (lbs/acre)           Nonpareil-Newell         8481 b         1.15 cde	<b>Variety</b> Nonpareil-Nico Nonpareil-3-8-2-70	18776 a 17744 abc 17790 abc	wt (g) 0.99 bcde 1.05 bc 1.00 bcd	percentage           68.0 abc           70.7 a           70.1 ab	unit PAR int. 90.1 a 79.5 ab 69.4 abc	Tree 41.0 a 41.0 a 39.2 a	4964 a 4962 a 4745 a	kernel yield (lbs/acre) 19523 a 18878 ab 18767 abc
Nonpareil-6         1630         bcde         1.04         bc         70.0 ab         74.7 ab         38.2 a         4619 a         17838         bcd           2-19e         18253 ab         0.91 bcde         64.8 abcd         65.2 bcd         36.8 a         4460 a         17560         cd           Nonpareil-Jones         16993 abcd         0.96 bcde         70.0 abc         70.0 abc         36.0 a         4360 a         17570         e           Sweetheart         14969         e         0.86         de         64.1 bcde         47.3 cde         28.2 bc         3412 bc         14215         e           Sweetheart         14969         e         0.86 de         63.3 de         45.0 de         28.2 bc         3412 bc         14215         e           Kahl         12420 f         0.89 cde         53.5 f         45.0 de         22.7 d         2746 d         12054           Kochi         8701 g         1.22 a         63.5 cde         9.4 c         23.3 d         2825 d         11247           Variety         No. of nuts/tree         wt (g)         percentage         unit PAR int.         Tree         Acree         (lbs/acre)           Nonpareil-Newell         8481 b         1.15 cde	Variety Nonpareil-Nico Nonpareil-3-8-2-70 Nonpareil-Newell	18776 a 17744 abc 17790 abc 17943 ab	wt (g) 0.99 bcde 1.05 bc 1.00 bcd 0.98 bcde	percentage           68.0 abc           70.7 a           70.1 ab           66.0 abcd	unit PAR int. 90.1 a 79.5 ab 69.4 abc 72.8 ab	<b>Tree</b> 41.0 a 41.0 a 39.2 a 38.7 a	4964 a 4962 a 4745 a 4683 a	kernel yield (lbs/acre) 19523 a 18878 ab 18767 abc 18593 abc
2-19e         18253 ab         0.91 bcde         64.8 abcd         65.2 bcd         36.8 a         4460 a         17560 cd           Nonpareil-Jones         16993 abcd         0.96 bcde         70.0 ab         70.0 abc         36.0 a         4360 a         17051 d           Sweetheart         14969 e         0.86 de         64.1 bcde         47.3 cde         28.2 bc         3412 bc         14215 e           Chips         11901 f         0.94 bcde         60.3 de         44.7 de         24.4 bcd         2985 bcd         13818 e           Marcona         9633 g         1.07 b         30.8 c         45.0 de         22.7 d         2746 d         12054           Kochi         8701 g         1.22 a         63.5 cde         9.4 c         23.3 d         2825 d         11247           Variety         No. of nuts/tree         wt (g)         percentage         unit PAR int.         Tree         Acre         (lbs/acre)           Nonpareil-Nico         9520 b         1.13 de         67.7 bcd         75.6 ab         22.6 ab         273 ab         21611 ab           Nonpareil-S-8-2-70         8530 b         1.20 bc         70.9 bc         75.6 ab         22.2 ab         2663 abc         21329 ab           Nonpareil-S-	Variety Nonpareil-Nico Nonpareil-3-8-2-70 Nonpareil-Newell Nonpareil-Driver Nonpareil-7	18776 a 17744 abc 17790 abc 17943 ab 17078 abcd	wt (g)           0.99 bcde           1.05 bc           1.00 bcd           0.98 bcde           0.83 e	percentage           68.0 abc           70.7 a           70.1 ab           66.0 abcd           69.2 abc	unit PAR int. 90.1 a 79.5 ab 69.4 abc 72.8 ab 72.3 ab	<b>Tree</b> 41.0 a 41.0 a 39.2 a 38.7 a 31.4 a	4964 a 4962 a 4745 a 4683 a 4555 a	kernel yield (Ibs/acre) 19523 a 18878 ab 18767 abc 18593 abc 18443 abc
Nonpareil-Jones         16993 abcd         0.96 bcde         70.0 ab         70.0 abc         36.0 a         4360 a         17051 d           Winters         15979 cde         0.83 e         58.7 ef         56.8 cde         29.4 b         3554 b         14757 e           Sweetheart         14969 e         0.86 de         66.1 bcde         47.3 cde         28.2 bc         3412 bc         14215 c         14215 e           Chips         11901 f         0.94 bcde         60.3 de         44.7 de         24.7 bcd         2985 bcd         13918 e           Kahl         12420 f         0.89 cde         53.5 f         45.6 de         24.4 bcd         2953 bcd         13514 e           Marcona         9633 g         1.07 b         30.8 c         45.0 de         23.3 d         2825 d         11204           Kochi         8701 g         1.22 a         63.5 cde         9.4 e         23.3 d         2825 d         11247           Variety         No. of nuts/tree         wt (g)         percentage         fstelling         mit PAR int.         Tree         Acre         Kernel yield           Nonpareil-3-8-70         8530 b         1.13 de         67.9 bc         75.6 ab         22.6 ab         2753 ab         21611 ab	Variety Nonpareil-Nico Nonpareil-3-8-2-70 Nonpareil-Newell Nonpareil-Driver Nonpareil-7 Nonpareil-5	18776 a 17744 abc 17790 abc 17943 ab 17078 abcd 15744 de	wt (g)           0.99 bcde           1.05 bc           1.00 bcd           0.98 bcde           0.83 e           1.03 bc	percentage           68.0 abc           70.7 a           70.1 ab           66.0 abcd           69.2 abc           70.4 ab	unit PAR int. 90.1 a 79.5 ab 69.4 abc 72.8 ab 72.3 ab 70.2 abc	Tree 41.0 a 41.0 a 39.2 a 38.7 a 31.4 a 35.9 a	4964 a 4962 a 4745 a 4683 a 4555 a 4342 a	kernel yield (Ibs/acre) 19523 a 18878 ab 18767 abc 18593 abc 18443 abc 18050 bcd
Winters         15979         cde         0.83         e         58.7         ef         56.8         cde         29.4         b         3554         b         14757         e           Sweetheart         14969         e         0.86         de         64.1         bcde         47.3         cde         28.2         bc         3412         bc         14215         e           Chips         11901         f         0.94         bcde         60.3         de         44.7         de         28.7         d         2953         bcd         13918         e           Kahl         12420         f         0.89         cde         53.5         f         45.6         de         24.7         d         2953         bcd         13514         e           Marcona         9633         g         1.07         b         30.8         45.0         de         22.7         d         2746         d         12054           Variety         No. of nuts/tree         wt (g)         percentage         unit PAR int.         Tree         Acree         (lbs/acre)         (lbs/acre)         (lbs/acre)         109/263         22.6         ab         22.733         ab	Variety Nonpareil-Nico Nonpareil-3-8-2-70 Nonpareil-Newell Nonpareil-Driver Nonpareil-7 Nonpareil-5 Nonpareil-6	18776 a 17744 abc 17790 abc 17943 ab 17078 abcd 15744 de 16630 bcde	wt (g)           0.99 bcde           1.05 bc           1.00 bcd           0.98 bcde           0.83 e           1.03 bc           1.04 bc	percentage           68.0 abc           70.7 a           70.1 ab           66.0 abcd           69.2 abc           70.4 ab           70.0 ab	unit PAR int. 90.1 a 79.5 ab 69.4 abc 72.8 ab 72.3 ab 70.2 abc 74.7 ab	Tree 41.0 a 39.2 a 38.7 a 31.4 a 35.9 a 38.2 a	4964 a 4962 a 4745 a 4683 a 4555 a 4342 a 4619 a	kernel yield           (lbs/acre)           19523 a           18878 ab           18767 abc           18593 abc           18443 abc           18050 bcd           17838 bcd
Sweetheart         14969         e         0.86         de         64.1         bcde         47.3         cde         28.2         bcc         3412         bc<         14215         e           Chips         11901         f         0.94         bcde         60.3         de         44.7         de         24.7         bcd         2985         bcd         13918         e           Kahl         12420         f         0.89         cde         53.5         f         45.6         de         24.4         bcd         2985         bcd         13514         e           Kochi         8701         g         1.07         b         30.8         45.0         de         22.7         d         12054           Zord         Average kernel         Shelling         unit PAR int.         Tree         Acre         (lbs/acre)           Nonpareil-Newell         9530         1.13         de         67.7         bcd         75.0 ab         23.6 a         2861 a         22384 a           Nonpareil-Newell         8481         1.15         cde         66.9         bcd         76.8 a         21.2 abc         2563 abc         21329 ab         21611 ab         2129 ab	Variety Nonpareil-Nico Nonpareil-3-8-2-70 Nonpareil-Newell Nonpareil-Driver Nonpareil-7 Nonpareil-5 Nonpareil-6 2-19e	18776 a           17744 abc           17790 abc           17943 ab           17078 abcd           15744 de           16630 bcde           18253 ab	wt (g)           0.99 bcde           1.05 bc           1.00 bcd           0.88 bcde           0.83 e           1.03 bc           1.04 bc           0.91 bcde	percentage           68.0 abc           70.7 a           70.1 ab           66.0 abcd           69.2 abc           70.4 ab           70.0 ab           64.8 abcd	unit PAR int. 90.1 a 79.5 ab 69.4 abc 72.8 ab 72.3 ab 70.2 abc 74.7 ab 65.2 bcd	Tree 41.0 a 39.2 a 38.7 a 31.4 a 35.9 a 38.2 a 36.8 a	4964 a 4962 a 4745 a 4683 a 4555 a 4342 a 4619 a 4619 a 4460 a	kernel yield           (lbs/acre)           19523 a           18878 ab           18767 abc           18593 abc           18443 abc           18050 bcd           17838 bcd           17560 cd
Chips         11901         f         0.94 bcde         60.3         de         44.7         de         24.7         bcd         2985 bcd         13918         e           Kahl         12420         f         0.89         cde         53.5         f         45.6         de         24.4         bcd         2985 bcd         13514         e           Marcona         9633         g         1.07 b         30.8         45.0         de         22.7         d         2746         d         12054           Kochi         8701         g         1.22 a         63.5         cde         9.4         c         23.3         d         2825         d         11247           Variety         No. of nuts/tree         Average kernel         Shelling         Kernel pounds per         kernel yield           Variety         No. of nuts/tree         wt (g)         percentage         unit PAR int.         Tree         Acre         (lbs/acre)           Nonpareil-Nico         9520 b         1.13         de         67.7 bcd         75.0 ab         23.6 a         212.8 ab         21611 ab         21329 ab           Nonpareil-Driver         8606 b         1.18 bcd         67.6 bcd         73.8 ab <td>Variety Nonpareil-Nico Nonpareil-3-8-2-70 Nonpareil-Newell Nonpareil-Driver Nonpareil-7 Nonpareil-6 2-19e Nonpareil-Jones</td> <td>18776 a           17744 abc           17790 abc           17943 ab           17078 abcd           15744 de           16630 bcde           18253 ab           16993 abcd</td> <td>wt (g)           0.99 bcde           1.05 bc           1.00 bcd           0.88 bcde           0.83 e           1.03 bc           1.04 bc           0.91 bcde           0.96 bcde</td> <td>percentage           68.0 abc           70.7 a           70.1 ab           66.0 abcd           69.2 abc           70.4 ab           70.0 ab           64.8 abcd           70.0 ab</td> <td>unit PAR int. 90.1 a 79.5 ab 69.4 abc 72.8 ab 72.3 ab 70.2 abc 74.7 ab 65.2 bcd 70.0 abc</td> <td>Tree           41.0 a           39.2 a           38.7 a           31.4 a           35.9 a           38.2 a           36.8 a           36.0 a</td> <td>4964 a 4962 a 4745 a 4683 a 4555 a 4342 a 4619 a 4460 a 4360 a</td> <td>kernel yield (Ibs/acre)           19523 a           18878 ab           18767 abc           18593 abc           18443 abc           18050 bcd           17838 bcd           17560 cd           17051 d</td>	Variety Nonpareil-Nico Nonpareil-3-8-2-70 Nonpareil-Newell Nonpareil-Driver Nonpareil-7 Nonpareil-6 2-19e Nonpareil-Jones	18776 a           17744 abc           17790 abc           17943 ab           17078 abcd           15744 de           16630 bcde           18253 ab           16993 abcd	wt (g)           0.99 bcde           1.05 bc           1.00 bcd           0.88 bcde           0.83 e           1.03 bc           1.04 bc           0.91 bcde           0.96 bcde	percentage           68.0 abc           70.7 a           70.1 ab           66.0 abcd           69.2 abc           70.4 ab           70.0 ab           64.8 abcd           70.0 ab	unit PAR int. 90.1 a 79.5 ab 69.4 abc 72.8 ab 72.3 ab 70.2 abc 74.7 ab 65.2 bcd 70.0 abc	Tree           41.0 a           39.2 a           38.7 a           31.4 a           35.9 a           38.2 a           36.8 a           36.0 a	4964 a 4962 a 4745 a 4683 a 4555 a 4342 a 4619 a 4460 a 4360 a	kernel yield (Ibs/acre)           19523 a           18878 ab           18767 abc           18593 abc           18443 abc           18050 bcd           17838 bcd           17560 cd           17051 d
Kahl         12420         f         0.89         cde         53.5         f         45.6         de         24.4         bcd         2953         bcd         13514         e           Marcona         9633         g         1.07         b         30.8         c         45.0         de         22.7         d         2746         d         12054           Kochi         8701         g         1.22         a         63.5         cde         9.4         e         23.3         d         2825         d         11247           Zona         Average kernel wt (g)         Shelling percentage         Kernel pounds per         kernel yield           Vonpareil-Nico         9520 b         1.13         de         67.7         bcd         75.0 ab         23.6 a         2861 a         2384 a           Nonpareil-Newell         8481 b         1.15         cde         66.9         bcd         76.8 a         21.2 abc         2563 abc         2128 ab           Nonpareil-S         8006 b         1.18         bcd         67.6 bcd         73.8 ab         22.3 ab         2881 a         2041 abc           Nonpareil-5         8009 bc         1.9 bcd         69.4 bcd         76.7 ab <td>Variety Nonpareil-Nico Nonpareil-3-8-2-70 Nonpareil-Newell Nonpareil-Driver Nonpareil-5 Nonpareil-6 2-19e Nonpareil-Jones Winters</td> <td>18776 a           17744 abc           17790 abc           17903 abc           17978 abcd           17078 abcd           15744           16630           bcde           18253 ab           16993 abcd           15979</td> <td>wt (g)           0.99 bcde           1.05 bc           1.00 bcd           0.98 bcde           0.83 e           1.04 bc           0.91 bcde           0.95 bcde           0.93 bcde</td> <td>percentage           68.0 abc           70.7 a           70.1 ab           66.0 abcd           69.2 abc           70.4 ab           70.0 ab           64.8 abcd           70.0 ab           58.7 ef</td> <td>unit PAR int. 90.1 a 79.5 ab 69.4 abc 72.8 ab 72.3 ab 70.2 abc 74.7 ab 65.2 bcd 70.0 abc 56.8 cde</td> <td>Tree           41.0 a           39.2 a           38.7 a           31.4 a           35.9 a           38.2 a           36.8 a           36.0 a           29.4 b</td> <td>4964 a           4962 a           4745 a           4683 a           4555 a           4342 a           4619 a           4460 a           43554 b</td> <td>kernel yield (Ibs/acre)           19523 a           18878 ab           18767 abc           18593 abc           18433 abc           18050 bcd           17838 bcd           17560 cd           17051 d           14757 e</td>	Variety Nonpareil-Nico Nonpareil-3-8-2-70 Nonpareil-Newell Nonpareil-Driver Nonpareil-5 Nonpareil-6 2-19e Nonpareil-Jones Winters	18776 a           17744 abc           17790 abc           17903 abc           17978 abcd           17078 abcd           15744           16630           bcde           18253 ab           16993 abcd           15979	wt (g)           0.99 bcde           1.05 bc           1.00 bcd           0.98 bcde           0.83 e           1.04 bc           0.91 bcde           0.95 bcde           0.93 bcde	percentage           68.0 abc           70.7 a           70.1 ab           66.0 abcd           69.2 abc           70.4 ab           70.0 ab           64.8 abcd           70.0 ab           58.7 ef	unit PAR int. 90.1 a 79.5 ab 69.4 abc 72.8 ab 72.3 ab 70.2 abc 74.7 ab 65.2 bcd 70.0 abc 56.8 cde	Tree           41.0 a           39.2 a           38.7 a           31.4 a           35.9 a           38.2 a           36.8 a           36.0 a           29.4 b	4964 a           4962 a           4745 a           4683 a           4555 a           4342 a           4619 a           4460 a           43554 b	kernel yield (Ibs/acre)           19523 a           18878 ab           18767 abc           18593 abc           18433 abc           18050 bcd           17838 bcd           17560 cd           17051 d           14757 e
Kahl         12420         f         0.89         cde         53.5         f         45.6         de         24.4         bcd         2953         bcd         13514         e           Marcona         9633         g         1.07         b         30.8         c         45.0         de         22.7         d         2746         d         12054           Kochi         8701         g         1.22         a         63.5         cde         9.4         e         23.3         d         2825         d         11247           Zona         Average kernel wt (g)         Shelling percentage         Kernel pounds per         kernel yield           Vonpareil-Nico         9520 b         1.13         de         67.7         bcd         75.0 ab         23.6 a         2861 a         2384 a           Nonpareil-Newell         8481 b         1.15         cde         66.9         bcd         76.8 a         21.2 abc         2563 abc         2128 ab           Nonpareil-S         8006 b         1.18         bcd         67.6 bcd         73.8 ab         22.3 ab         2881 a         2041 abc           Nonpareil-5         8009 bc         1.9 bcd         69.4 bcd         76.7 ab <td>Variety Nonpareil-Nico Nonpareil-3-8-2-70 Nonpareil-Newell Nonpareil-Driver Nonpareil-7 Nonpareil-6 2-19e Nonpareil-Jones</td> <td>18776 a         17744 abc         17790 abc         17943 ab         17078 abcd         15744 de         16630 bcde         18253 ab         16993 abcd         15979 cde         14969 e</td> <td>wt (g)           0.99 bcde           1.05 bc           1.00 bcd           0.83 e           1.03 bc           1.04 bc           0.91 bcde           0.96 bcde           0.83 e           0.96 bcde           0.83 e           0.83 e           0.86 de</td> <td>percentage           68.0 abc           70.7 a           70.1 ab           66.0 abcd           69.2 abc           70.4 ab           70.0 ab           64.8 abcd           70.0 ab           58.7 ef           64.1 bcde</td> <td>unit PAR int.           90.1 a           79.5 ab           69.4 abc           72.8 ab           72.3 ab           70.2 abc           74.7 ab           65.2 bcd           70.0 abc           56.8 cde           47.3 cde</td> <td>Tree 41.0 a 41.0 a 39.2 a 38.7 a 31.4 a 35.9 a 38.2 a 36.8 a 36.0 a 29.4 b 28.2 bc</td> <td>4964 a           4962 a           4745 a           4683 a           4555 a           4342 a           4619 a           4460 a           3360 a           3554 b           3412 bc</td> <td>kernel yield (Ibs/acre)           19523 a           18878 ab           18767 abc           18593 abc           18505 bcd           18050 bcd           17838 bcd           17560 cd           17051 d           14757 e           14215 e</td>	Variety Nonpareil-Nico Nonpareil-3-8-2-70 Nonpareil-Newell Nonpareil-Driver Nonpareil-7 Nonpareil-6 2-19e Nonpareil-Jones	18776 a         17744 abc         17790 abc         17943 ab         17078 abcd         15744 de         16630 bcde         18253 ab         16993 abcd         15979 cde         14969 e	wt (g)           0.99 bcde           1.05 bc           1.00 bcd           0.83 e           1.03 bc           1.04 bc           0.91 bcde           0.96 bcde           0.83 e           0.96 bcde           0.83 e           0.83 e           0.86 de	percentage           68.0 abc           70.7 a           70.1 ab           66.0 abcd           69.2 abc           70.4 ab           70.0 ab           64.8 abcd           70.0 ab           58.7 ef           64.1 bcde	unit PAR int.           90.1 a           79.5 ab           69.4 abc           72.8 ab           72.3 ab           70.2 abc           74.7 ab           65.2 bcd           70.0 abc           56.8 cde           47.3 cde	Tree 41.0 a 41.0 a 39.2 a 38.7 a 31.4 a 35.9 a 38.2 a 36.8 a 36.0 a 29.4 b 28.2 bc	4964 a           4962 a           4745 a           4683 a           4555 a           4342 a           4619 a           4460 a           3360 a           3554 b           3412 bc	kernel yield (Ibs/acre)           19523 a           18878 ab           18767 abc           18593 abc           18505 bcd           18050 bcd           17838 bcd           17560 cd           17051 d           14757 e           14215 e
Marcona         9633         g         1.07 b         30.8         45.0         de         22.7         d         2746         d         12054           Kochi         8701         g         1.22 a         63.5 cde         9.4         e         23.3 d         2825 d         11247           Zona         Marcona         Marcona         Marcona         Marcona         Stelling percentage         Kernel pounds per         Kernel yield (lbs/acre)           Zona         Shalling percentage         Kernel pounds per         Kernel yield         Kernel yield           Nonpareil-Nico         9520 b         1.13 de         67.7 bcd         75.0 ab         23.6 a         2861 a         22384 a           Nonpareil-Newell         8481 b         1.15 cde         66.9 bcd         76.8 a         21.2 abc         2563 abc         2128 ab           Nonpareil-Driver         8606 b         1.14 cde         85.2 a         76.7 a         23.2 a         2811 a         21254 abc           Nonpareil-Driver         8606 b         1.19 bcd         69.4 bcd         75.7 ab         20.1 abc         2432 abc         20613 bc           Nonpareil-F         8909 bc         1.19 bcd         69.4 bcd         75.7 ab         20.1 abc         2432	Variety Nonpareil-Nico Nonpareil-3-8-2-70 Nonpareil-Newell Nonpareil-Driver Nonpareil-5 Nonpareil-6 2-19e Nonpareil-Jones Winters	18776 a         17744 abc         17790 abc         17943 ab         17078 abcd         15744 de         16630 bcde         18253 ab         16993 abcd         15979 cde         14969 e	wt (g)           0.99 bcde           1.05 bc           1.00 bcd           0.83 e           1.03 bc           1.04 bc           0.91 bcde           0.96 bcde           0.83 e           0.96 bcde           0.83 e           0.83 e           0.86 de	percentage           68.0 abc           70.7 a           70.1 ab           66.0 abcd           69.2 abc           70.4 ab           70.0 ab           64.8 abcd           70.0 ab           58.7 ef           64.1 bcde	unit PAR int.           90.1 a           79.5 ab           69.4 abc           72.8 ab           72.3 ab           70.2 abc           74.7 ab           65.2 bcd           70.0 abc           56.8 cde           47.3 cde	Tree 41.0 a 41.0 a 39.2 a 38.7 a 31.4 a 35.9 a 38.2 a 36.8 a 36.0 a 29.4 b 28.2 bc	4964 a           4962 a           4745 a           4683 a           4555 a           4342 a           4619 a           4460 a           3360 a           3554 b           3412 bc	kernel yield (Ibs/acre)           19523 a           18878 ab           18767 abc           18593 abc           18505 bcd           18050 bcd           17838 bcd           17560 cd           17051 d           14757 e           14215 e
Kochi         8701         g         1.22 a         63.5         cde         9.4         e         23.3         d         2825         d         11247           2012         No. of nuts/tree         Average kernel wt (g)         Shelling percentage         Kernel pounds per         kernel yield           Variety         No. of nuts/tree         Average kernel wt (g)         Shelling percentage         Kernel pounds per         kernel yield           Nonpareil-Nico         9520 b         1.13         de         67.7         bcd         75.0 ab         23.6 a         2861 a         22384 a           Nonpareil-Se-2-70         8530 b         1.20 bc         70.9 bc         75.6 ab         22.6 ab         2733 ab         21611 ab           Nonpareil-Driver         8606 b         1.18 bcd         67.6 bcd         73.8 ab         22.3 ab         2695 ab         21329 ab           Nonpareil-5         8090 bc         1.19 bcd         69.0 bcd         74.1 ab         21.2 abc         2563 abc         20613 bc           Nonpareil-6         11507 a         0.94         59.6 cd         69.3 c         23.8 a         2881 a         20441 bc           Nonpareil-6         11507 a         0.94         69.4 bcd         75.7 ab         20.	Variety Nonpareil-Nico Nonpareil-3-8-2-70 Nonpareil-Newell Nonpareil-Driver Nonpareil-5 Nonpareil-5 Nonpareil-6 2-19e Nonpareil-Jones Winters Sweetheart	18776 a           17744 abc           17790 abc           17933 ab           17078 abcd           15744 de           16630 bcde           18253 ab           16993 abcd           15979 cde           14969 e           11901 f	wt (g)           0.99 bcde           1.05 bc           1.00 bcd           0.88 bcde           0.83 e           1.04 bc           0.91 bcde           0.96 bcde           0.83 e           0.96 bcde           0.86 de           0.94 bcde	percentage           68.0 abc           70.7 a           70.1 ab           66.0 abcd           69.2 abc           70.4 ab           70.0 ab           64.8 abcd           70.0 ab           58.7 ef           64.1 bcde           60.3 de	unit PAR int.           90.1 a           79.5 ab           69.4 abc           72.8 ab           72.3 ab           70.2 abc           74.7 ab           65.2 bcd           70.0 abc           56.8 cde           47.3 cde           44.7 de	Tree           41.0 a           39.2 a           38.7 a           31.4 a           35.9 a           38.2 a           36.8 a           36.0 a           29.4 b           28.2 bc           24.7 bcd	4964 a           4962 a           4745 a           4683 a           4555 a           4342 a           4619 a           4460 a           4360 a           3554 b           3412 bc           2985 bcd	kernel yield (Ibs/acre)           19523 a           18878 ab           18767 abc           18593 abc           18443 abc           18050 bcd           17838 bcd           17560 cd           17051 d           14757 e           14215 e           13918 e
Average kernel Variety         Average kernel wt (g)         Shelling percentage         Kernel pounds per unit PAR int.         Kernel pounds per Tee         Kernel yield (lbs/acre)           Nonpareil-Nico         9520 b         1.13 de         67.7 bcd         75.0 ab         23.6 a         2861 a         22384 a           Nonpareil-Newell         8481 b         1.15 cde         66.9 bcd         76.8 a         21.2 abc         2563 abc         21329 ab           Nonpareil-Driver         8606 b         1.18 bcd         67.6 bcd         73.8 ab         22.3 ab         2695 abc         21329 ab           Nonpareil-Driver         8606 b         1.19 bcd         69.0 bcd         74.1 ab         21.2 abc         2563 abc         20613 bc           Nonpareil-5         8090 bc         1.19 bcd         69.4 bcd         75.7 ab         21.2 abc         2563 abc         20613 bc           Nonpareil-6         11507 a         0.94         59.6 cd         69.3 c         23.8 a         2881 a         20441 bc           2-19e         7617 bc         1.19 bcd         69.4 bcd         75.7 ab         20.1 abc         2338 ab         17095 d           Nonpareil-Jones         8855 b         1.18 bcd         67.7 bcd         75.3 ab         23.0 ab         2738 ab	Variety Nonpareil-Nico Nonpareil-3-8-2-70 Nonpareil-Newell Nonpareil-Driver Nonpareil-7 Nonpareil-5 Nonpareil-6 2-19e Nonpareil-Jones Winters Sweetheart Chips Kahl	18776 a           17744 abc           17790 abc           17943 ab           17078 abcd           15744 de           16630 bcde           18253 ab           16993 abcd           15979 cde           14969 e           11901 f           12420 f	wt (g)           0.99 bcde           1.05 bc           1.00 bcd           0.98 bcde           0.83 e           1.03 bc           1.04 bc           0.96 bcde           0.93 bcde           0.94 bcde           0.83 e           0.86 de           0.94 bcde           0.86 cde           0.89 cde	percentage           68.0 abc           70.7 a           70.1 ab           66.0 abcd           69.2 abc           70.4 ab           70.0 ab           64.8 abcd           70.0 ab           58.7 ef           64.1 bcde           60.3 de           53.5 f	unit PAR int.           90.1 a           79.5 ab           69.4 abc           72.8 ab           70.2 abc           74.7 ab           65.2 bcd           70.0 abc           56.8 cde           47.3 cde           44.7 de           45.6 de	Tree           41.0 a           39.2 a           38.7 a           31.4 a           35.9 a           38.2 a           36.8 a           36.0 a           29.4 b           28.2 bc           24.7 bcd           24.4 bcd	4964 a           4962 a           4745 a           4683 a           4555 a           4342 a           4619 a           4460 a           4360 a           3554 b           3412 bc           2985 bcd           2953 bcd	kernel yield (Ibs/acre)           19523 a           18878 ab           18767 abc           18593 abc           18843 abc           186050 bcd           17838 bcd           177560 cd           177051 d           144215 e           13918 e           13514 e
Variety         No. of nuts/tree         wt (g)         percentage         unit PAR int.         Tree         Acre         (lbs/acre)           Nonpareil-Nico         9520 b         1.13 de         67.7 bcd         75.0 ab         23.6 a         2861 a         22384 a           Nonpareil-Newell         8431 b         1.20 bc         70.9 bc         75.6 ab         22.6 ab         2733 ab         21611 ab           Nonpareil-Newell         8481 b         1.15 cde         66.9 bcd         76.8 a         21.2 abc         2563 abc         21329 ab           Nonpareil-Newell         8406 b         1.18 bcd         67.6 bcd         73.8 ab         22.3 ab         2695 ab         21288 ab           Nonpareil-7         9262 b         1.14 cde         85.2 a         76.7 a         23.2 a         2811 a         21254 abc           Nonpareil-6         11507 a         0.94         59.6 cd         69.3 c         23.8 a         2881 a         20411 bc           2-19e         7617 bc         1.19 bcd         69.4 bcd         75.7 ab         20.1 abc         2432 abc         20270 bc           Nonpareil-Jones         8855 b         1.18 bcd         67.7 bcd         73.3 b         23.0 ab         2783 ab         19833 c         238 abc<	Variety Nonpareil-Nico Nonpareil-3-8-2-70 Nonpareil-Driver Nonpareil-Driver Nonpareil-5 Nonpareil-6 2-19e Nonpareil-6 2-19e Nonpareil-Jones Winters Sweetheart Chips Kahl Marcona	18776 a           17744 abc           17790 abc           17903 abc           17978 abcd           17078 abcd           15744           16630           bcde           18253 ab           16993 abcd           15979           cde           14969           11901           12420           9633           g	wt (g)           0.99 bcde           1.05 bc           1.00 bcd           0.83 e           1.03 bc           1.04 bc           0.91 bcde           0.96 bcde           0.83 e           0.86 cde           0.86 cde           0.94 bcde           0.95 cde           1.07 b	percentage           68.0 abc           70.7 a           70.1 ab           66.0 abcd           69.2 abc           70.4 ab           70.0 ab           64.8 abcd           70.0 ab           58.7 ef           64.1 bcde           60.3 de           53.5 f           30.8 g	unit PAR int.           90.1 a           79.5 ab           69.4 abc           72.8 ab           72.3 ab           70.2 abc           74.7 ab           65.2 bcd           70.0 abc           56.8 cde           47.3 cde           44.7 de           45.6 de           45.0 de	Tree           41.0 a           39.2 a           38.7 a           31.4 a           35.9 a           38.2 a           36.8 a           36.0 a           29.4 b           28.2 bc           24.7 bcd           24.4 bcd           22.7 dd	4964 a           4962 a           4745 a           4683 a           4555 a           4342 a           4619 a           4460 a           4360 a           3554 b           3412 bc           2985 bcd           2985 bcd           2953 bcd           2746 d	kernel yield (Ibs/acre)           19523 a           18878 ab           18767 abc           18593 abc           188050 bcd           17838 bcd           17750 cd           17750 cd           14215 e           13318 e           13514 e           12054 f
Variety         No. of nuts/tree         wt (g)         percentage         unit PAR int.         Tree         Acre         (lbs/acre)           Nonpareil-Nico         9520 b         1.13 de         67.7 bcd         75.0 ab         23.6 a         2861 a         22384 a           Nonpareil-Newell         8431 b         1.20 bc         70.9 bc         75.6 ab         22.6 ab         2733 ab         21611 ab           Nonpareil-Newell         8481 b         1.15 cde         66.9 bcd         76.8 a         21.2 abc         2563 abc         21329 ab           Nonpareil-Newell         8406 b         1.18 bcd         67.6 bcd         73.8 ab         22.3 ab         2695 ab         21288 ab           Nonpareil-7         9262 b         1.14 cde         85.2 a         76.7 a         23.2 a         2811 a         21254 abc           Nonpareil-6         11507 a         0.94         59.6 cd         69.3 c         23.8 a         2881 a         20411 bc           2-19e         7617 bc         1.19 bcd         69.4 bcd         75.7 ab         20.1 abc         2432 abc         20270 bc           Nonpareil-Jones         8855 b         1.18 bcd         67.7 bcd         73.3 b         23.0 ab         2783 ab         19833 c         238 abc<	Variety Nonpareil-Nico Nonpareil-3-8-2-70 Nonpareil-Newell Nonpareil-Driver Nonpareil-7 Nonpareil-5 Nonpareil-6 2-19e Nonpareil-Jones Winters Sweetheart Chips Kahl	18776 a           17744 abc           17790 abc           17903 abc           17978 abcd           17078 abcd           15744           16630           bcde           18253 ab           16993 abcd           15979           cde           14969           11901           12420           9633           g	wt (g)           0.99 bcde           1.05 bc           1.00 bcd           0.83 e           1.03 bc           1.04 bc           0.91 bcde           0.96 bcde           0.83 e           0.86 cde           0.86 cde           0.94 bcde           0.95 cde           1.07 b	percentage           68.0 abc           70.7 a           70.1 ab           66.0 abcd           69.2 abc           70.4 ab           70.0 ab           64.8 abcd           70.0 ab           58.7 ef           64.1 bcde           60.3 de           53.5 f           30.8 g	unit PAR int.           90.1 a           79.5 ab           69.4 abc           72.8 ab           72.3 ab           70.2 abc           74.7 ab           65.2 bcd           70.0 abc           56.8 cde           47.3 cde           44.7 de           45.6 de           45.0 de	Tree           41.0 a           39.2 a           38.7 a           31.4 a           35.9 a           38.2 a           36.8 a           36.0 a           29.4 b           28.2 bc           24.7 bcd           24.4 bcd           22.7 dd	4964 a           4962 a           4745 a           4683 a           4555 a           4342 a           4619 a           4460 a           4360 a           3554 b           3412 bc           2985 bcd           2985 bcd           2953 bcd           2746 d	kernel yield (Ibs/acre)           19523 a           18878 ab           18767 abc           18593 abc           188050 bcd           17838 bcd           17750 cd           17750 cd           14215 e           13318 e           13514 e           12054 f
Variety         No. of nuts/tree         wt (g)         percentage         unit PAR int.         Tree         Acre         (lbs/acre)           Nonpareil-Nico         9520 b         1.13 de         67.7 bcd         75.0 ab         23.6 a         2861 a         22384 a           Nonpareil-Newell         8431 b         1.20 bc         70.9 bc         75.6 ab         22.6 ab         2733 ab         21611 ab           Nonpareil-Newell         8481 b         1.15 cde         66.9 bcd         76.8 a         21.2 abc         2563 abc         21329 ab           Nonpareil-Newell         8406 b         1.18 bcd         67.6 bcd         73.8 ab         22.3 ab         2695 ab         21288 ab           Nonpareil-7         9262 b         1.14 cde         85.2 a         76.7 a         23.2 a         2811 a         21254 abc           Nonpareil-6         11507 a         0.94         59.6 cd         69.3 c         23.8 a         2881 a         20411 bc           2-19e         7617 bc         1.19 bcd         69.4 bcd         75.7 ab         20.1 abc         2432 abc         20270 bc           Nonpareil-Jones         8855 b         1.18 bcd         67.7 bcd         73.3 b         23.0 ab         2783 ab         19833 c         238 abc<	Variety Nonpareil-Nico Nonpareil-3-8-2-70 Nonpareil-Newell Nonpareil-Driver Nonpareil-7 Nonpareil-5 Nonpareil-6 2-19e Nonpareil-Jones Winters Sweetheart Chips Kahl Marcona Kochi	18776 a           17744 abc           17790 abc           17903 abc           17978 abcd           17078 abcd           15744           16630           bcde           18253 ab           16993 abcd           15979           cde           14969           11901           12420           9633           g	wt (g)           0.99 bcde           1.05 bc           1.00 bcd           0.83 e           1.03 bc           1.04 bc           0.91 bcde           0.96 bcde           0.83 e           0.86 cde           0.86 cde           0.94 bcde           0.95 cde           1.07 b	percentage           68.0 abc           70.7 a           70.1 ab           66.0 abcd           69.2 abc           70.4 ab           70.0 ab           64.8 abcd           70.0 ab           58.7 ef           64.1 bcde           60.3 de           53.5 f           30.8 g           63.5 cde	unit PAR int.           90.1 a           79.5 ab           69.4 abc           72.8 ab           72.3 ab           70.2 abc           74.7 ab           65.2 bcd           70.0 abc           56.8 cde           47.3 cde           44.7 de           45.6 de           45.0 de	Tree           41.0 a           39.2 a           38.7 a           31.4 a           35.9 a           38.2 a           36.8 a           36.0 a           29.4 b           28.2 bc           24.7 bcd           24.4 bcd           22.7 dd	4964 a           4962 a           4745 a           4683 a           4555 a           4342 a           4619 a           4460 a           4360 a           3554 b           3412 bc           2985 bcd           2985 bcd           2953 bcd           2746 d	kernel yield (Ibs/acre)           19523 a           18878 ab           18767 abc           18593 abc           18800 bcd           17838 bcd           17750 cd           17750 cd           17751 d           14215 e           13318 e           13514 e           12054 f
Nonpareii-Nico         9520 b         1.13 de         67.7 bcd         75.0 ab         23.6 a         2861 a         22384 a           Nonpareii-3-8-2-70         8530 b         1.20 bc         70.9 bc         75.6 ab         22.6 ab         2733 ab         21611 ab           Nonpareii-Newell         8481 b         1.15 cde         66.9 bcd         76.8 a         21.2 abc         2563 abc         21329 ab           Nonpareii-Driver         8606 b         1.18 bcd         67.6 bcd         73.8 ab         22.3 ab         2695 ab         21284 ab           Nonpareil-T         9262 b         1.14 cde         85.2 a         76.7 a         23.2 a         2811 a         21254 abc           Nonpareil-5         8090 bc         1.19 bcd         69.0 bcd         74.1 ab         21.2 abc         2563 abc         20613 bc           Nonpareil-6         11507 a         0.94         59.6 cd         69.3 c         23.8 a         2881 a         20441 bc           Nonpareil-Jones         8855 b         1.18 bcd         67.7 bcd         73.3 b         23.0 ab         2738 ab         19833 c           Winters         8679 b         1.01         61.9 bcd         61.0 d         19.3 abc         2338 abc         17095 d           <	Variety Nonpareil-Nico Nonpareil-3-8-2-70 Nonpareil-Driver Nonpareil-Driver Nonpareil-5 Nonpareil-6 2-19e Nonpareil-6 2-19e Nonpareil-Jones Winters Sweetheart Chips Kahl Marcona	18776 a           17744 abc           17790 abc           17903 abc           17978 abcd           17078 abcd           15744           16630           bcde           18253 ab           16993 abcd           15979           cde           14969           11901           12420           9633           g	wt (g)           0.99 bcde           1.05 bc           1.00 bcd           0.98 bcde           0.83 e           1.04 bc           0.91 bcde           0.96 bcde           0.83 e           0.96 bcde           0.86 de           0.94 bcde           0.85 cde           1.07 b           1.07 b           1.22 a	percentage           68.0 abc           70.7 a           70.1 ab           66.0 abcd           69.2 abc           70.4 ab           70.0 ab           64.8 abcd           70.0 ab           58.7 ef           64.1 bcde           60.3 de           53.5 f           30.8 g           63.5 cde	unit PAR int.           90.1 a           79.5 ab           69.4 abc           72.8 ab           72.3 ab           70.2 abc           74.7 ab           65.2 bcd           70.0 abc           56.8 cde           47.3 cde           44.7 de           45.6 de           45.0 de           9.4 6	Tree           41.0 a           39.2 a           38.7 a           31.4 a           35.9 a           36.8 a           36.0 a           29.4 b           28.2 bc           24.7 bcd           24.4 bcd           22.7 d           23.3 d	4964 a           4962 a           4745 a           4683 a           4555 a           4342 a           4619 a           4460 a           4360 a           3554 b           3412 bc           2985 bcd           2985 bcd           2953 bcd           2746 d	kernel yield (Ibs/acre)           19523 a           18878 ab           18767 abc           18593 abc           18443 abc           18050 bcd           17838 bcd           17560 cd           17051 d           14215 e           13918 e           13514 e           12054 f           11247
Nonpareii-3-8-2-70         8530 b         1.20 bc         70.9 bc         75.6 ab         22.6 ab         2733 ab         21611 ab           Nonpareii-Newell         8481 b         1.15 cde         66.9 bcd         76.8 a         21.2 abc         2563 abc         21329 ab           Nonpareii-Driver         8606 b         1.18 bcd         67.6 bcd         73.8 ab         22.3 ab         2695 ab         21288 ab           Nonpareii-T         9262 b         1.14 cde         85.2 a         76.7 a         23.2 a         2811 a         21254 abc           Nonpareii-5         8090 bc         1.19 bcd         69.0 bcd         74.1 ab         21.2 abc         2563 abc         20613 bc           Nonpareii-6         11507 a         0.94         59.6 cd         69.3 c         23.8 a         2881 a         20441 bc           2-19e         7617 bc         1.19 bcd         69.4 bcd         75.7 ab         20.1 abc         2432 abc         20270 bc           Nonpareii-Jones         8855 b         1.18 bcd         67.7 bcd         73.3 b         23.0 ab         2738 ab         19833 c           Winters         8679 b         1.01         61.9 bcd         61.0 d         19.3 abc         2338 abc         17095 d <td< td=""><td>Variety Nonpareil-Nico Nonpareil-3-8-2-70 Nonpareil-Newell Nonpareil-Driver Nonpareil-7 Nonpareil-5 2-19e Nonpareil-6 2-19e Nonpareil-Jones Winters Sweetheart Chips Kahl Marcona Kochi 2012</td><td>18776 a         17744 abc         17790 abc         17943 ab         17078 abcd         15744 de         16630 bcde         18253 ab         16993 abcd         15979 cde         14969 e         11901 f         12420 f         9633 g         8701 g</td><td>wt (g)           0.99 bcde           1.05 bc           1.00 bcd           0.88 bcde           0.83 c           1.04 bc           0.91 bcde           0.83 e           0.96 bcde           0.83 c           0.91 bcde           0.86 de           0.89 cde           1.07 b           1.22 a</td><td>percentage           68.0 abc           70.7 a           70.1 ab           66.0 abcd           69.2 abc           70.4 ab           70.0 ab           64.8 abcd           70.0 ab           58.7 ef           64.1 bcde           60.3 de           53.5 f           30.8 g           63.5 cde</td><td>unit PAR int. 90.1 a 79.5 ab 69.4 abc 72.8 ab 72.3 ab 70.2 abc 74.7 ab 65.2 bcd 70.0 abc 56.8 cde 47.3 cde 44.7 de 45.6 de 45.6 de 9.4 c</td><td>Tree           41.0 a           41.0 a           39.2 a           38.7 a           31.4 a           35.9 a           36.8 a           36.0 a           29.4 b           28.2 bc           24.7 bcd           24.4 bcd           22.7 d           23.3 d           Kernel pounds per</td><td>4964 a 4962 a 4745 a 4683 a 4555 a 4342 a 4619 a 4460 a 4360 a 3554 b 3412 bc 2985 bcd 2985 bcd 2953 bcd 2746 d 2825 d</td><td>kernel yield (Ibs/acre)           19523 a           18878 ab           18767 abc           18878 ab           18878 ab           18893 abc           18893 abc           18893 abc           18693 abc           18050 bcd           17838 bcd           17750 cd           17750 d           14757 e           13918 e           13514 e           12054 f           11247 n           kernel yield</td></td<>	Variety Nonpareil-Nico Nonpareil-3-8-2-70 Nonpareil-Newell Nonpareil-Driver Nonpareil-7 Nonpareil-5 2-19e Nonpareil-6 2-19e Nonpareil-Jones Winters Sweetheart Chips Kahl Marcona Kochi 2012	18776 a         17744 abc         17790 abc         17943 ab         17078 abcd         15744 de         16630 bcde         18253 ab         16993 abcd         15979 cde         14969 e         11901 f         12420 f         9633 g         8701 g	wt (g)           0.99 bcde           1.05 bc           1.00 bcd           0.88 bcde           0.83 c           1.04 bc           0.91 bcde           0.83 e           0.96 bcde           0.83 c           0.91 bcde           0.86 de           0.89 cde           1.07 b           1.22 a	percentage           68.0 abc           70.7 a           70.1 ab           66.0 abcd           69.2 abc           70.4 ab           70.0 ab           64.8 abcd           70.0 ab           58.7 ef           64.1 bcde           60.3 de           53.5 f           30.8 g           63.5 cde	unit PAR int. 90.1 a 79.5 ab 69.4 abc 72.8 ab 72.3 ab 70.2 abc 74.7 ab 65.2 bcd 70.0 abc 56.8 cde 47.3 cde 44.7 de 45.6 de 45.6 de 9.4 c	Tree           41.0 a           41.0 a           39.2 a           38.7 a           31.4 a           35.9 a           36.8 a           36.0 a           29.4 b           28.2 bc           24.7 bcd           24.4 bcd           22.7 d           23.3 d           Kernel pounds per	4964 a 4962 a 4745 a 4683 a 4555 a 4342 a 4619 a 4460 a 4360 a 3554 b 3412 bc 2985 bcd 2985 bcd 2953 bcd 2746 d 2825 d	kernel yield (Ibs/acre)           19523 a           18878 ab           18767 abc           18878 ab           18878 ab           18893 abc           18893 abc           18893 abc           18693 abc           18050 bcd           17838 bcd           17750 cd           17750 d           14757 e           13918 e           13514 e           12054 f           11247 n           kernel yield
Nonpareii-Newell         8481 b         1.15         cde         66.9 bcd         76.8 a         21.2 abc         2563 abc         21329 ab           Nonpareii-Driver         8606 b         1.18         bcd         67.6 bcd         73.8 ab         22.3 ab         2695 ab         21228 ab           Nonpareii-Driver         9262 b         1.14         cde         85.2 a         76.7 a         23.2 a         2811 a         21254 abc           Nonpareii-5         8090 bc         1.19 bcd         69.0 bcd         74.1 ab         21.2 abc         2563 abc         20613 bc           Nonpareii-6         11507 a         0.94         59.6 cd         69.3 c         23.8 a         2881 a         20441 bc           2-19e         7617 bc         1.19 bcd         69.4 bcd         75.7 ab         20.1 abc         2432 abc         20270 bc           Nonpareii-5         8855 b         1.18 bcd         67.7 bcd         73.3 b         23.0 ab         2783 ab         19833 c           Winters         8679 b         1.01         61.9 bcd         68.5 c         21.0 abc         2538 abc         16456 d           Sweetheart         8653 b         1.10 ef         59.8 cd         68.5 c         21.0 abc         2538 abc <td< td=""><td>Variety Nonpareil-Nico Nonpareil-3-8-2-70 Nonpareil-Driver Nonpareil-Driver Nonpareil-7 Nonpareil-6 2-19e Nonpareil-6 2-19e Nonpareil-Jones Winters Sweetheart Chips Kahl Marcona Kochi 2012 Variety</td><td>18776 a           17744 abc           17790 abc           17903 abc           17978 abcd           15744           16630 bcde           18253 ab           16993 abcd           15979           14969           11901           12420           9633           8701           g</td><td>wt (g)           0.99 bcde           1.05 bc           1.00 bcd           0.83 e           1.03 bc           1.04 bc           0.91 bcde           0.96 bcde           0.83 e           0.96 bcde           0.83 e           0.94 bcde           0.85 cde           1.07 b           1.22 a           Average kernel wt (g)</td><td>percentage           68.0 abc           70.7 a           70.1 ab           66.0 abcd           69.2 abc           70.4 ab           70.0 ab           64.8 abcd           70.0 ab           58.7 ef           64.1 bcde           60.3 de           53.5 f           30.8 (c           63.5 ccde           Shelling percentage</td><td>unit PAR int.           90.1 a           79.5 ab           69.4 abc           72.3 ab           70.2 abc           74.7 ab           65.2 bcd           70.0 abc           56.8 cde           44.7 de           44.7 de           45.6 de           9.4 e           unit PAR int.</td><td>Tree           41.0 a           41.0 a           39.2 a           38.7 a           31.4 a           35.9 a           38.2 a           36.8 a           36.0 a           29.4 b           28.2 bc           24.7 bcd           24.4 bcd           22.7 d           23.3 d           Kernel pounds per           Tree</td><td>4964 a         4962 a         4745 a         4683 a         4555 a         4342 a         4619 a         4460 a         33554 b         3412 bc         2985 bcd         2985 bcd         2746 d         2825 d</td><td>kernel yield (Ibs/acre)           19523 a           18878 ab           18767 abc           18593 abc           188050 bcd           17838 bcd           17750 cd           17750 cd           17750 cd           17338 bcd           17501 d           14215 e           13918 e           13514 e           12054 f           11247 f           kernel yield (lbs/acre)</td></td<>	Variety Nonpareil-Nico Nonpareil-3-8-2-70 Nonpareil-Driver Nonpareil-Driver Nonpareil-7 Nonpareil-6 2-19e Nonpareil-6 2-19e Nonpareil-Jones Winters Sweetheart Chips Kahl Marcona Kochi 2012 Variety	18776 a           17744 abc           17790 abc           17903 abc           17978 abcd           15744           16630 bcde           18253 ab           16993 abcd           15979           14969           11901           12420           9633           8701           g	wt (g)           0.99 bcde           1.05 bc           1.00 bcd           0.83 e           1.03 bc           1.04 bc           0.91 bcde           0.96 bcde           0.83 e           0.96 bcde           0.83 e           0.94 bcde           0.85 cde           1.07 b           1.22 a           Average kernel wt (g)	percentage           68.0 abc           70.7 a           70.1 ab           66.0 abcd           69.2 abc           70.4 ab           70.0 ab           64.8 abcd           70.0 ab           58.7 ef           64.1 bcde           60.3 de           53.5 f           30.8 (c           63.5 ccde           Shelling percentage	unit PAR int.           90.1 a           79.5 ab           69.4 abc           72.3 ab           70.2 abc           74.7 ab           65.2 bcd           70.0 abc           56.8 cde           44.7 de           44.7 de           45.6 de           9.4 e           unit PAR int.	Tree           41.0 a           41.0 a           39.2 a           38.7 a           31.4 a           35.9 a           38.2 a           36.8 a           36.0 a           29.4 b           28.2 bc           24.7 bcd           24.4 bcd           22.7 d           23.3 d           Kernel pounds per           Tree	4964 a         4962 a         4745 a         4683 a         4555 a         4342 a         4619 a         4460 a         33554 b         3412 bc         2985 bcd         2985 bcd         2746 d         2825 d	kernel yield (Ibs/acre)           19523 a           18878 ab           18767 abc           18593 abc           188050 bcd           17838 bcd           17750 cd           17750 cd           17750 cd           17338 bcd           17501 d           14215 e           13918 e           13514 e           12054 f           11247 f           kernel yield (lbs/acre)
Nonpareil-Driver         8606 b         1.18 bcd         67.6 bcd         73.8 ab         22.3 ab         2695 ab         21288 ab           Nonpareil-7         9262 b         1.14 cde         85.2 a         76.7 a         23.2 a         2811 a         21254 abc           Nonpareil-5         8090 bc         1.19 bcd         69.0 bcd         74.1 ab         21.2 abc         2563 abc         20613 bc           Nonpareil-6         11507 a         0.94         59.6 cd         69.3 c         23.8 a         2881 a         20441 bc           2-19e         7617 bc         1.19 bcd         69.4 bcd         75.7 ab         20.1 abc         2432 abc         202070 bc           Nonpareil-Jones         8855 b         1.18 bcd         67.7 bcd         73.3 b         23.0 ab         2783 ab         19833 c           Winters         88679 b         1.01         61.9 bcd         68.5 c         21.0 abc         2538 abc         16456 d           Sweetheart         8653 b         1.10         ef         59.8 cd         68.5 c         21.0 abc         2538 abc         16456 d           Chips         9008 b         0.92         75.3 ab         76.2 ab         18.2 bc         2201 bc         16416 d           Kahl </td <td>Variety Nonpareil-Nico Nonpareil-3-8-2-70 Nonpareil-3-8-2-70 Nonpareil-Driver Nonpareil-Driver Nonpareil-5 Nonpareil-5 Nonpareil-6 2-19e Nonpareil-Jones Winters Sweetheart Chips Kahl Marcona Kochi 2012 Variety Nonpareil-Nico</td> <td>18776 a         17744 abc         17790 abc         17943 ab         17078 abcd         15744 de         16630 bcde         18253 ab         16993 abcd         15979 cde         14969 e         11901 f         12420 f         9633 g         8701 g         No. of nuts/tree         9520 b</td> <td>wt (g)           0.99 bcde           1.05 bc           1.00 bcd           0.83 e           1.03 bc           1.04 bc           0.96 bcde           0.83 e           0.96 bcde           0.86 de           0.94 bcde           0.86 cde           1.07 b           1.22 a           Average kernel wt (g)           1.13 de</td> <td>percentage           68.0 abc           70.7 a           70.1 ab           66.0 abcd           69.2 abc           70.4 ab           70.0 ab           64.8 abcd           70.0 ab           58.7 ef           64.1 bcde           60.3 de           53.5 f           30.8 g           63.5 cde           Shelling           percentage           67.7 bcd</td> <td>unit PAR int.           90.1 a           79.5 ab           69.4 abc           72.8 ab           72.3 ab           70.2 abc           74.7 ab           65.2 bcd           70.0 abc           56.8 cde           47.3 cde           44.7 de           45.6 de           9.4           9.4           9.4           9.4           9.4           9.4           9.4           9.4           9.4           9.4           9.4</td> <td>Tree           41.0 a           39.2 a           38.7 a           31.4 a           35.9 a           38.2 a           36.8 a           36.0 a           29.4 b           28.2 bc           24.7 bcd           24.4 bcd           22.7 d           23.3 d           Kernel pounds per           Tree           23.6 a</td> <td>4964 a 4962 a 4745 a 4683 a 4555 a 4342 a 4619 a 4460 a 4360 a 3554 b 3412 bc 2985 bcd 2985 bcd 2985 bcd 2985 d 2746 d 2825 d</td> <td>kernel yield (Ibs/acre)           19523 a           18878 ab           18767 abc           18593 abc           18403 abc           18050 bcd           17838 bcd           177500 cd           17750 cd           14215 e           13918 e           13514 e           12054 f           11247 f           22384 a</td>	Variety Nonpareil-Nico Nonpareil-3-8-2-70 Nonpareil-3-8-2-70 Nonpareil-Driver Nonpareil-Driver Nonpareil-5 Nonpareil-5 Nonpareil-6 2-19e Nonpareil-Jones Winters Sweetheart Chips Kahl Marcona Kochi 2012 Variety Nonpareil-Nico	18776 a         17744 abc         17790 abc         17943 ab         17078 abcd         15744 de         16630 bcde         18253 ab         16993 abcd         15979 cde         14969 e         11901 f         12420 f         9633 g         8701 g         No. of nuts/tree         9520 b	wt (g)           0.99 bcde           1.05 bc           1.00 bcd           0.83 e           1.03 bc           1.04 bc           0.96 bcde           0.83 e           0.96 bcde           0.86 de           0.94 bcde           0.86 cde           1.07 b           1.22 a           Average kernel wt (g)           1.13 de	percentage           68.0 abc           70.7 a           70.1 ab           66.0 abcd           69.2 abc           70.4 ab           70.0 ab           64.8 abcd           70.0 ab           58.7 ef           64.1 bcde           60.3 de           53.5 f           30.8 g           63.5 cde           Shelling           percentage           67.7 bcd	unit PAR int.           90.1 a           79.5 ab           69.4 abc           72.8 ab           72.3 ab           70.2 abc           74.7 ab           65.2 bcd           70.0 abc           56.8 cde           47.3 cde           44.7 de           45.6 de           9.4           9.4           9.4           9.4           9.4           9.4           9.4           9.4           9.4           9.4           9.4	Tree           41.0 a           39.2 a           38.7 a           31.4 a           35.9 a           38.2 a           36.8 a           36.0 a           29.4 b           28.2 bc           24.7 bcd           24.4 bcd           22.7 d           23.3 d           Kernel pounds per           Tree           23.6 a	4964 a 4962 a 4745 a 4683 a 4555 a 4342 a 4619 a 4460 a 4360 a 3554 b 3412 bc 2985 bcd 2985 bcd 2985 bcd 2985 d 2746 d 2825 d	kernel yield (Ibs/acre)           19523 a           18878 ab           18767 abc           18593 abc           18403 abc           18050 bcd           17838 bcd           177500 cd           17750 cd           14215 e           13918 e           13514 e           12054 f           11247 f           22384 a
Nonpareil-7         9262 b         1.14 cde         85.2 a         76.7 a         23.2 a         2811 a         21254 abc           Nonpareil-5         8090 bc         1.19 bcd         69.0 bcd         74.1 ab         21.2 abc         2563 abc         20613 bc           Nonpareil-6         11507 a         0.94         59.6 cd         69.3 c         23.8 a         2881 a         20613 bc           219e         7617 bc         1.19 bcd         69.4 bcd         75.7 ab         20.1 abc         2432 abc         20270 bc           Nonpareil-Jones         8855 b         1.18 bcd         67.7 bcd         73.3 b         23.0 ab         2783 ab         19833 c           Winters         8679 b         1.01         61.9 bcd         61.0 d         19.3 abc         2538 abc         17095 d           Sweetheart         8653 b         1.10 ef         59.8 cd         68.5 c         21.0 abc         2538 abc         16456 d           Chips         9008 b         0.92         75.3 ab         76.2 ab         18.2 bc         2201 bc         16416 d           Kahl         8830 b         1.05 fg         55.0 d         57.5 e         20.4 abc         2465 abc         15979 d           Marcona         6449 c	Variety Nonpareil-Nico Nonpareil-3-8-2-70 Nonpareil-Newell Nonpareil-Driver Nonpareil-7 Nonpareil-5 Nonpareil-6 2-19e Nonpareil-Jones Winters Sweetheart Chips Kahl Marcona Kochi 2012 Variety Nonpareil-Nico Nonpareil-3-8-2-70	18776 a           17744 abc           17790 abc           17943 ab           17078 abcd           15744 de           16630 bcde           18253 ab           16993 abcd           15979 cde           14969 e           11901 f           12420 f           9633 g           8701 g           9520 b           8530 b	wt (g)           0.99 bcde           1.05 bc           1.00 bcd           0.98 bcde           0.83 e           1.03 bc           1.04 bc           0.91 bcde           0.96 bcde           0.83 e           0.96 bcde           0.86 de           0.94 bcde           0.89 ccde           1.07 b           1.22 a           Average kernel wt (g)           1.13 de           1.20 bc	percentage           68.0 abc           70.7 a           70.1 ab           66.0 abcd           69.2 abc           70.4 ab           70.0 ab           64.8 abcd           70.0 ab           58.7 ef           64.1 bcde           60.3 de           53.5 f           30.8 g           63.5 cde           Shelling           percentage           67.7 bcd           70.9 bc	unit PAR int. 90.1 a 79.5 ab 69.4 abc 72.8 ab 72.3 ab 70.2 abc 74.7 ab 65.2 bcd 70.0 abc 56.8 cde 47.3 cde 44.7 de 45.6 de 45.6 de 45.6 de 45.6 de 45.0 de 9.4 c	Tree           41.0 a           39.2 a           38.7 a           31.4 a           35.9 a           36.8 a           36.0 a           29.4 b           28.2 bc           24.4 bcd           22.7 d           23.3 d           Kernel pounds per           Tree           23.6 a           22.6 ab	4964 a 4962 a 4745 a 4683 a 4555 a 4342 a 4619 a 4460 a 4360 a 3554 b 3412 bc 2953 bcd 2953 bcd 2953 bcd 2746 d 2825 d <b>Acre</b> 2861 a 2733 ab	kernel yield (Ibs/acre)           19523 a           18878 ab           18767 abc           18593 abc           18443 abc           18050 bcd           17838 bcd           17750 cd           17051 d           14215 e           13918 e           12054 f           11247 f           22384 a           21611 ab
Nonpareil-5         8090 bc         1.19 bcd         69.0 bcd         74.1 ab         21.2 abc         2563 abc         20613 bc           Nonpareil-6         11507 a         0.94         59.6 cd         69.3 c         23.8 a         2881 a         20441 bc           2-19e         7617 bc         1.19 bcd         69.4 bcd         75.7 ab         20.1 abc         2432 abc         20270 bc           Nonpareil-Jones         8855 b         1.18 bcd         67.7 bcd         73.3 b         23.0 ab         2738 ab         1983 ab         1983 ac           Winters         8679 b         1.01         61.9 bcd         61.0 d         19.3 abc         2338 abc         17095 d           Sweetheart         8653 b         1.10 ef         59.8 cd         68.5 c         21.0 abc         2538 abc         16456 d           Chips         9008 b         0.92         75.3 ab         76.2 ab         18.2 bc         2201 bc         16416 d           Kahl         8830 b         1.05 fg         55.0 d         57.5 e         20.4 abc         2465 abc         1597 d           Marcona         6449 c         1.22 b         65.5 bcd         74.5 ab         17.4 c         2104 c         13351 e6	Variety Nonpareil-Nico Nonpareil-3-8-2-70 Nonpareil-Driver Nonpareil-Driver Nonpareil-7 Nonpareil-5 Nonpareil-6 2-19e Nonpareil-3 Sweetheart Chips Kahl Marcona Kochi 2012 Variety Nonpareil-3-8-2-70 Nonpareil-Newell	18776 a           17744 abc           17790 abc           17943 ab           17078 abcd           15744 de           16630 bcde           18253 ab           16993 abcd           15979 cde           14969 e           11901 f           12420 f           9633 g           8701 g           No. of nuts/tree           9520 b           8530 b           8481 b	wt (g)           0.99 bcde           1.05 bc           1.00 bcd           0.83 cde           0.83 cde           1.04 bc           0.96 bcde           0.83 e           0.91 bcde           0.86 de           0.89 cde           1.07 b           1.07 b           1.22 a           Average kernel           wt (g)           1.13 de           1.20 bc           1.15 cde	percentage           68.0 abc           70.7 a           70.1 ab           66.0 abcd           69.2 abc           70.4 ab           70.0 ab           64.8 abcd           70.0 ab           68.7 ef           64.1 bcde           60.3 de           53.5 ff           30.8 g           63.5 cde           Shelling           percentage           67.7 bcd           70.9 bc           66.9 bcd	unit PAR int.           90.1 a           79.5 ab           69.4 abc           72.8 ab           72.3 ab           70.2 abc           74.7 ab           65.2 bcd           70.0 abc           56.8 cde           44.7 de           44.7 de           45.6 de           9.4 ce           unit PAR int.           75.0 ab           75.6 ab           76.8 a	Tree           41.0 a           41.0 a           39.2 a           38.7 a           31.4 a           35.9 a           38.2 a           36.8 a           36.0 a           29.4 b           24.7 bcd           22.7 d           23.3 d           Cernel pounds per           Tree           23.6 a           22.6 ab           21.2 abc	4964 a         4962 a         4745 a         4683 a         4555 a         4342 a         4619 a         4460 a         4360 a         3554 b         3412 bc         2953 bcd         2746 d         2825 d	kernel yield (Ibs/acre)           19523 a           18878 ab           18767 abc           18593 abc           184050 bcd           17838 bcd           17838 bcd           17750 cd           17750 cd           14757 e           14215 e           13918 e           12054 f           11247 f           22384 a           221611 ab           21112 ab           21329 ab
Nonpareil-5         8090 bc         1.19 bcd         69.0 bcd         74.1 ab         21.2 abc         2563 abc         20613 bc           Nonpareil-6         11507 a         0.94         59.6 cd         69.3 c         23.8 a         2881 a         20441 bc           2-19e         7617 bc         1.19 bcd         69.4 bcd         75.7 ab         20.1 abc         2432 abc         20270 bc           Nonpareil-Jones         8855 b         1.18 bcd         67.7 bcd         73.3 b         23.0 ab         2738 ab         1983 ab         1983 ac           Winters         8679 b         1.01         61.9 bcd         61.0 d         19.3 abc         2338 abc         17095 d           Sweetheart         8653 b         1.10 ef         59.8 cd         68.5 c         21.0 abc         2538 abc         16456 d           Chips         9008 b         0.92         75.3 ab         76.2 ab         18.2 bc         2201 bc         16416 d           Kahl         8830 b         1.05 fg         55.0 d         57.5 e         20.4 abc         2465 abc         1597 d           Marcona         6449 c         1.22 b         65.5 bcd         74.5 ab         17.4 c         2104 c         13351 e6	Variety Nonpareil-Nico Nonpareil-3-8-2-70 Nonpareil-Newell Nonpareil-Driver Nonpareil-7 Nonpareil-5 Nonpareil-6 2-19e Nonpareil-Jones Winters Sweetheart Chips Kahl Marcona Kochi 2012 Variety Nonpareil-Nico Nonpareil-3-8-2-70	18776 a           17744 abc           17790 abc           17943 ab           17078 abcd           15744 de           16630 bcde           18253 ab           16993 abcd           15979 cde           14969 e           11901 f           12420 f           9633 g           8701 g           No. of nuts/tree           9520 b           8530 b           8481 b	wt (g)           0.99 bcde           1.05 bc           1.00 bcd           0.83 cde           0.83 cde           1.04 bc           0.96 bcde           0.83 e           0.91 bcde           0.86 de           0.89 cde           1.07 b           1.07 b           1.22 a           Average kernel           wt (g)           1.13 de           1.20 bc           1.15 cde	percentage           68.0 abc           70.7 a           70.1 ab           66.0 abcd           69.2 abc           70.4 ab           70.0 ab           64.8 abcd           70.0 ab           68.7 ef           64.1 bcde           60.3 de           53.5 ff           30.8 g           63.5 cde           Shelling           percentage           67.7 bcd           70.9 bc           66.9 bcd	unit PAR int.           90.1 a           79.5 ab           69.4 abc           72.8 ab           72.3 ab           70.2 abc           74.7 ab           65.2 bcd           70.0 abc           56.8 cde           44.7 de           445.6 de           9.4 ce           9.4 ce           9.4 ce           75.6 ab           75.6 ab           76.8 a           73.8 ab	Tree           41.0 a           41.0 a           39.2 a           38.7 a           31.4 a           35.9 a           38.2 a           36.8 a           36.0 a           29.4 b           24.7 bcd           22.7 d           23.3 d           Cernel pounds per           Tree           23.6 a           22.6 ab           21.2 abc	4964 a         4962 a         4745 a         4683 a         4555 a         4342 a         4619 a         4460 a         4360 a         3554 b         3412 bc         2953 bcd         2746 d         2825 d	kernel yield (Ibs/acre)           19523 a           18878 ab           18767 abc           18593 abc           188050 bcd           17838 bcd           177500 cd           17750 cd           17750 cd           13918 e           12054 f           112054 f           21329 ab           21329 ab           21329 ab           21328 ab
Nonpareil-6         11507 a         0.94         59.6 cd         69.3 c         23.8 a         2881 a         20441 bc           2-19e         7617 bc         1.19 bcd         69.4 bcd         75.7 ab         20.1 abc         2432 abc         20270 bc           Nonpareil-Jones         8855 b         1.18 bcd         67.7 bcd         73.3 b         23.0 ab         2783 ab         19833 c           Winters         8679 b         1.01         61.9 bcd         61.0 d         19.3 abc         2338 abc         17095 d           Sweetheart         8653 b         1.10 ef         59.8 cd         68.5 c         21.0 abc         2538 abc         16456 d           Chips         9008 b         0.92         75.3 ab         76.2 ab         18.2 bc         2201 bc         16416 d           Kahl         8830 b         1.05 fg         55.0 d         57.5 e         20.4 abc         2465 abc         15979 d           Marcona         6449 c         1.22 b         65.5 bcd         74.5 ab         17.4 c         2104 c         13351         6	Variety Nonpareil-Nico Nonpareil-3-8-2-70 Nonpareil-Driver Nonpareil-Driver Nonpareil-7 Nonpareil-5 Nonpareil-6 2-19e Nonpareil-3 Sweetheart Chips Kahl Marcona Kochi 2012 Variety Nonpareil-3-8-2-70 Nonpareil-Newell	18776 a           17744 abc           17790 abc           17903 abc           17978 abcd           15744           16630 bcde           18253 ab           16993 abcd           15979           14969           11901           12420           9633           8701           9633           8701           9520           8830           8841           8606	wt (g)           0.99 bcde           1.05 bc           1.00 bcd           0.83 e           1.03 bc           1.04 bc           0.91 bcde           0.96 bcde           0.83 e           0.83 e           0.86 de           0.94 bcde           0.89 cde           1.07 b           1.22 a           Average kernel wt (g)           1.13 de           1.20 bc           1.15 cde           1.18 bcd	percentage           68.0 abc           70.7 a           70.1 ab           66.0 abcd           69.2 abc           70.4 ab           70.0 ab           64.8 abcd           70.0 ab           58.7 ef           64.1 bcde           60.3 de           53.5 f           30.8 g           63.5 cde           Shelling percentage           67.7 bcd           70.9 bc           66.9 bcd           67.6 bcd	unit PAR int.           90.1 a           79.5 ab           69.4 abc           72.8 ab           72.3 ab           70.2 abc           74.7 ab           65.2 bcd           70.0 abc           56.8 cde           44.7 de           445.6 de           9.4 ce           9.4 ce           9.4 ce           75.6 ab           75.6 ab           76.8 a           73.8 ab	Tree           41.0 a           41.0 a           39.2 a           38.7 a           31.4 a           35.9 a           38.2 a           36.8 a           36.0 a           29.4 b           28.2 bc           24.7 bcd           24.7 bcd           22.7 d           23.3 d           Kernel pounds per           Tree           23.6 a           22.6 ab           21.2 abc           22.3 ab	4964 a         4962 a         4745 a         4683 a         4555 a         4342 a         4619 a         4460 a         33554 b         33554 b         2885 bcd         2985 bcd         2985 bcd         2746 d         2825 d         2825 d         2825 d         2861 a         2733 ab         2565 abc         2695 ab	kernel yield (Ibs/acre)           19523 a           18878 ab           18767 abc           18593 abc           18878 a           18593 abc           18800 bcd           17838 bcd           17750 cd           17750 cd           17750 e           14215 e           13318 e           13514 e           12054 f           11247 f           22384 a           21329 ab           21328 ab
2-19e         7617         bc         1.19         bcd         69.4         bcd         75.7         ab         20.1         abc         2432         abc         20270         bc           Nonpareil-Jones         8855         b         1.18         bcd         67.7         bcd         73.3         b         23.0         ab         2783         ab         19833         c           Winters         8879         b         1.01         61.9         bcd         61.0         d         19.3         abc         2338         abc         17095         d           Sweetheart         8653         b         1.10         ef         59.8         cd         68.5         c         21.0         abc         2538         abc         16456         d           Chips         9008         0.902         75.3         76.2         18.2         bc         2201         bc         16416         d           Kahl         8830         1.05         fg         55.0         d         57.5         e         20.4         abc         15979         d           Marcona         6449         c         1.22         b         65.5         bcd         <	Variety Nonpareil-Nico Nonpareil-3-8-2-70 Nonpareil-3-8-2-70 Nonpareil-Driver Nonpareil-5 Nonpareil-5 Nonpareil-5 Nonpareil-5 Sweetheart Chips Kahl Marcona Kochi 2012 Variety Nonpareil-Nico Nonpareil-Nico Nonpareil-Nico Nonpareil-Nico Nonpareil-Nico Nonpareil-Nico Nonpareil-Nico Nonpareil-Nico	18776 a         17744 abc         17790 abc         17943 ab         17078 abcd         15744 de         16630 bcde         18253 ab         16993 abcd         15979 cde         14969 e         11901 f         12420 f         9633 g         8701 g         No. of nuts/tree         9520 b         8530 b         8481 b         8606 b         9262 b	wt (g)           0.99 bcde           1.05 bc           1.00 bcd           0.83 e           1.03 bc           1.04 bc           0.96 bcde           0.83 e           0.96 bcde           0.83 e           0.96 bcde           0.86 de           0.94 bcde           0.89 cde           1.07 b           1.22 a           Average kernel wt (g)           1.13 de           1.20 bc           1.15 cde           1.18 bcd           1.14 cde	percentage           68.0 abc           70.7 a           70.1 ab           66.0 abcd           69.2 abc           70.4 ab           70.0 ab           64.8 abcd           70.0 ab           58.7 ef           64.1 bcde           60.3 de           53.5 ff           30.8 g           63.5 cde           Shelling           percentage           67.7 bcd           70.9 bc           66.9 bcd           67.6 bcd           85.2 a	unit PAR int. 90.1 a 79.5 ab 69.4 abc 72.8 ab 72.3 ab 70.2 abc 74.7 ab 65.2 bcd 70.0 abc 56.8 cde 47.3 cde 47.3 cde 47.3 cde 45.6 de 45.6 de 45.6 de 9.4 c 9.4 c 9.7 c 9.6 ab 75.6 ab 76.8 a 73.8 ab 76.7 a	Tree           41.0 a           41.0 a           39.2 a           38.7 a           31.4 a           35.9 a           38.2 a           36.8 a           36.0 a           29.4 b           28.2 bc           24.7 bcd           24.4 bcd           22.7 d           23.3 d           Cernel pounds per           Tree           23.6 a           22.6 ab           21.2 abc           22.3 ab           23.2 a	4964 a 4962 a 4745 a 4683 a 4555 a 4342 a 4619 a 4460 a 4360 a 3554 b 3412 bc 2985 bcd 2985 bcd 2985 bcd 2985 bcd 2985 db 2825 d 2825 d 2746 d 2825 d 2861 a 2733 ab 2563 abc 2695 ab 2811 a	kernel yield (Ibs/acre)           19523 a           18878 ab           18767 abc           18593 abc           18433 abc           18050 bcd           17838 bcd           177500 cd           17750 cd           14215 e           13918 e           132514 e           12054 ff           11247           22384 a           21329 ab           21254 abc
Nonpareil-Jones         8855         b         1.18         bcd         67.7         bcd         73.3         b         23.0         ab         2783         ab         19833         c           Winters         8679         b         1.01         61.9         bcd         61.0         d         19.3         abc         2338         abc         17095         d           Sweetheart         8653         b         1.10         ef         59.8         cd         68.5         c         21.0         abc         2538         abc         17095         d           Chips         9008         b         0.92         75.3         ab         76.2         18.2         bc         2201         bc         16416         d           Kahl         8830         b         1.05         fg         55.0         d         57.5         e         20.4         abc         2465         abc         15979         d           Marcona         6449         c         1.22         65.5         bcd         74.5         ab         17.4         c         2104         c         13351         e	Variety Nonpareil-Nico Nonpareil-3-8-2-70 Nonpareil-Newell Nonpareil-Driver Nonpareil-7 Nonpareil-5 Nonpareil-6 2-19e Nonpareil-10nes Winters Sweetheart Chips Kahl Marcona Kochi 2012 Variety Nonpareil-Nico Nonpareil-Nico Nonpareil-Priver Nonpareil-7 Nonpareil-5	18776 a         17744 abc         17790 abc         17943 ab         17078 abcd         15744 de         16630 bcde         18253 ab         16993 abcd         15979 cde         14969 e         11901 f         12420 f         9633 g         8701 g         8520 b         8530 b         8481 b         8606 b         9262 b         8800 bc	wt (g)           0.99 bcde           1.05 bc           1.00 bcd           0.98 bcde           0.83 e           1.04 bc           0.91 bcde           0.96 bcde           0.83 e           0.96 bcde           0.86 de           0.94 bcde           0.89 ccde           1.07 b           1.22 a           Average kernel wt (g)           1.13 de           1.20 bc           1.15 cde           1.14 cde           1.19 bcd	percentage           68.0 abc           70.7 a           70.1 ab           66.0 abcd           69.2 abc           70.4 ab           70.0 ab           64.8 abcd           70.0 ab           64.4 abcd           70.0 ab           64.7 bcde           60.3 de           53.5 f           30.8 g           63.5 cde           Shelling           percentage           67.7 bcd           70.9 bc           66.9 bcd           67.6 bcd           85.2 a           69.0 bcd	unit PAR int. 90.1 a 79.5 ab 69.4 abc 72.8 ab 72.3 ab 70.2 abc 74.7 ab 65.2 bcd 70.0 abc 56.8 cde 47.3 cde 44.7 de 45.6 de 45.0 de 9.4 e Unit PAR int. 75.0 ab 76.8 a 76.8 a 76.8 a 76.7 a 74.1 ab	Tree           41.0 a           39.2 a           38.7 a           31.4 a           35.9 a           36.8 a           36.0 a           29.4 b           28.2 bc           24.4 bcd           22.7 d           23.3 d           Kernel pounds per           Tree           23.6 a           22.2 abc           22.3 ab           21.2 abc           22.3 ab           23.2 a           21.2 abc	4964 a 4962 a 4745 a 4683 a 4555 a 4342 a 4619 a 4460 a 4360 a 3554 b 3412 bc 2985 bcd 2953 bcd 2746 d 2825 d <b>Acre</b> 2861 a 2733 ab 2563 abc 2695 ab 2863 abc	kernel yield (Ibs/acre)           19523 a           18878 ab           18767 abc           18593 abc           184050 bcd           17838 bcd           17838 bcd           17750 cd           17750 cd           17750 cd           17750 cd           14757 e           14215 e           13918 e           13514 e           12054 f           11247           kernel yield           (Ibs/acre)           22384 a           21611 ab           21329 ab           2128 ab           21254 abc           20613 bc
Winters         8679 b         1.01         61.9 bcd         61.0 d         19.3 abc         2338 abc         17095 d           Sweetheart         8653 b         1.10 ef         59.8 cd         68.5 c         21.0 abc         2538 abc         18456 d           Chips         9008 b         0.92         75.3 ab         76.2 ab         18.2 bc         2201 bc         16416 d           Kahl         8830 b         1.05 fg         55.0 d         57.5 e         20.4 abc         2465 abc         1597 d           Marcona         6449 c         1.22 b         65.5 bcd         74.5 ab         17.4 c         2104 c         13351 e	Variety Nonpareil-Nico Nonpareil-3-8-2-70 Nonpareil-Driver Nonpareil-Driver Nonpareil-7 Nonpareil-5 Nonpareil-6 2-19e Nonpareil-3 Winters Sweetheart Chips Kahl Marcona Kochi 2012 Variety Nonpareil-Nico Nonpareil-Nico Nonpareil-Nico Nonpareil-Nicer Nonpareil-7 Nonpareil-5 Nonpareil-6	18776 a           17744 abc           17790 abc           17943 ab           17078 abcd           15744 de           16630 bcde           18253 ab           16993 abcd           15979 cde           14969 e           11901 f           12420 f           9633 g           8701 g           No. of nuts/tree           9520 b           8530 b           8481 b           8606 b           9262 b           8090 bcc           11507 a	wt (g)           0.99 bcde           1.05 bc           1.00 bcd           0.83 e           1.03 bc           1.04 bc           0.96 bcde           0.96 bcde           0.83 e           0.96 bcde           0.83 e           0.94 bcde           0.89 cde           1.07 b           1.22 a           Average kernel wt (g)           1.13 de           1.20 bc           1.15 cde           1.18 bcd           1.14 cde           1.19 bcd           0.94	percentage           68.0 abc           70.7 a           70.1 ab           66.0 abcd           69.2 abc           70.4 ab           70.0 ab           64.8 abcd           70.0 ab           58.7 ef           64.1 bcde           60.3 de           53.5 ff           30.8 g           63.5 cde           Shelling percentage           67.7 bcd           70.9 bc           66.9 bcd           67.6 bcd           85.2 a           69.0 bcd           59.6 cd	unit PAR int.           90.1 a           79.5 ab           69.4 abc           72.8 ab           72.3 ab           70.2 abc           74.7 ab           65.2 bcd           70.0 abc           56.8 cde           47.3 cde           44.7 de           45.6 de           9.4 ce           9.4 ce           9.4 ce           75.0 ab           76.6 a           73.8 ab           76.7 a           74.1 ab           69.3 c	Tree           41.0 a           41.0 a           39.2 a           38.7 a           31.4 a           35.9 a           38.2 a           36.8 a           36.0 a           29.4 b           28.2 bc           24.7 bcd           22.7 d           23.3 d           Cernel pounds per           Tree           23.6 a           22.6 ab           21.2 abc           22.3 ab           23.2 a           21.2 abc           23.8 a	4964 a 4962 a 4745 a 4683 a 4555 a 4342 a 4619 a 4460 a 4360 a 3554 b 3412 bc 2985 bcd 2953 bcd 2746 d 2825 d <b>Acre</b> 2861 a 2753 ab 2563 abc 2695 ab 2811 a 2563 abc 2881 a	kernel yield (Ibs/acre)           19523 a           18878 ab           18767 abc           18593 abc           18878 ab           18593 abc           18800 bcd           17838 bcd           17750 cd           17750 cd           17750 cd           14215 e           13918 e           12054 f           112054 f           11247           22384 a           21611 ab           21329 ab           21254 abc           20613 bc           20441 bc
Sweetheart         8653 b         1.10 ef         59.8 cd         68.5 c         21.0 abc         2538 abc         16456 d           Chips         9008 b         0.92         75.3 ab         76.2 ab         18.2 bc         2201 bc         16416 d           Kahl         8830 b         1.05 fg         55.0 d         57.5 e         20.4 abc         2465 abc         15979 d           Marcona         6449 c         1.22 b         65.5 bcd         74.5 ab         17.4 c         2104 c         13351 e	Variety Nonpareil-Nico Nonpareil-3-8-2-70 Nonpareil-3-8-2-70 Nonpareil-Driver Nonpareil-Driver Nonpareil-5 Nonpareil-5 Nonpareil-5 Nonpareil-5 Winters Sweetheart Chips Kahl Marcona Kochi 2012 Variety Nonpareil-Nico Nonpareil-Nico Nonpareil-Nico Nonpareil-Newell Nonpareil-7 Nonpareil-5 Nonpareil-6 2-19e	18776 a         17744 abc         17790 abc         17943 ab         17078 abcd         15744 de         16630 bcde         18253 ab         16993 abcd         15979 cde         14969 e         11901 f         12420 f         9633 g         8701 g         ************************************	wt (g)           0.99 bcde           1.05 bc           1.00 bcd           0.83 e           1.03 bc           1.04 bc           0.96 bcde           0.83 e           0.96 bcde           0.83 e           0.86 de           0.94 bcde           0.85 cde           1.07 b           1.22 a           Average kernel wt (g)           1.13 de           1.20 bc           1.15 cde           1.14 cde           1.14 bcd           0.94	percentage           68.0 abc           70.7 a           70.1 ab           66.0 abcd           69.2 abc           70.4 ab           70.0 ab           64.8 abcd           70.0 ab           58.7 ef           64.1 bcde           60.3 de           53.5 f           30.8 g           63.5 cde           Shelling           percentage           67.7 bcd           70.9 bc           66.9 bcd           67.6 bcd           85.2 a           69.0 bcd           59.6 cd           69.4 bcd	unit PAR int.           90.1 a           79.5 ab           69.4 abc           72.8 ab           72.3 ab           70.2 abc           74.7 ab           65.2 bcd           70.0 abc           56.8 cde           44.7 de           445.6 de           9.4 ce           9.4 ce           9.4 ce           75.0 ab           75.6 ab           76.8 a           76.7 a           74.1 ab           69.3 c           75.7 ab	Tree           41.0 a           41.0 a           39.2 a           38.7 a           31.4 a           35.9 a           38.2 a           36.8 a           36.0 a           29.4 b           28.2 bc           24.7 bcd           24.7 bcd           22.7 d           23.3 d           Cernel pounds per           22.6 ab           22.12 abc           22.3 ab           23.2 a           21.2 abc           23.8 a           20.1 abc	4964 a 4962 a 4745 a 4683 a 4555 a 4342 a 4619 a 4460 a 4360 a 3554 b 3412 bc 2985 bcd 2985 bcd 2985 bcd 2985 bcd 2953 bcd 2825 d 2825 d 2825 d 2861 a 2733 ab 2563 abc 2695 ab 2811 a 2563 abc 2881 a 2811 a 2563 abc 2881 a 2432 abc	kernel yield (Ibs/acre)           19523 a           18878 ab           18767 abc           18593 abc           186050 bcd           17838 bcd           17838 bcd           17750 cd           17750 cd           17750 cd           14215 e           13318 e           133514 e           12054 f           11247           kernel yield (Ibs/acre)           22384 a           21611 ab           21329 ab           21254 abc           20613 bc           20441 bc           20424 bc
Sweetheart         8653 b         1.10 ef         59.8 cd         68.5 c         21.0 abc         2538 abc         16456 d           Chips         9008 b         0.92         75.3 ab         76.2 ab         18.2 bc         2201 bc         16416 d           Kahl         8830 b         1.05 fg         55.0 d         57.5 e         20.4 abc         2465 abc         15979 d           Marcona         6449 c         1.22 b         65.5 bcd         74.5 ab         17.4 c         2104 c         13351 e	Variety Nonpareil-Nico Nonpareil-3-8-2-70 Nonpareil-3-8-2-70 Nonpareil-1-Newell Nonpareil-7 Nonpareil-7 Nonpareil-5 Nonpareil-6 2-19e Winters Sweetheart Chips Kahl Marcona Kochi 2012 Variety Nonpareil-Nico Nonpareil-Newell Nonpareil-3-8-2-70 Nonpareil-1-Newell Nonpareil-7 Nonpareil-5 Nonpareil-6 2-19e Nonpareil-6 2-19e Nonpareil-Jones	18776 a         17744 abc         17790 abc         17943 ab         17078 abcd         15744 de         16630 bcde         18253 ab         16993 abcd         15979 cde         14969 e         11901 f         12420 f         9633 g         8701 g         9520 b         8530 b         8481 b         8606 b         9262 b         8090 bc         11507 a         7617 bc         8855 b	wt (g)           0.99 bcde           1.05 bc           1.00 bcd           0.88 bcde           0.83 e           1.04 bc           0.96 bcde           0.83 e           0.96 bcde           0.86 de           0.94 bcde           0.86 cde           0.94 bcde           0.89 cde           1.07 b           1.22 a           Average kernel wt (g)           1.13 de           1.20 bc           1.18 bcd           1.19 bcd           0.94           1.19 bcd           1.18 bcd	percentage           68.0 abc           70.7 a           70.1 ab           66.0 abcd           69.2 abc           70.4 ab           70.0 ab           64.1 bcde           60.3 de           53.5 f           30.8 g           63.5 cde           Shelling           percentage           67.7 bcd           70.9 bc           66.9 bcd           67.6 bcd           85.2 a           69.4 bcd           67.7 bcd	unit PAR int. 90.1 a 79.5 ab 69.4 abc 72.8 ab 72.3 ab 70.2 abc 74.7 ab 65.2 bcd 70.0 abc 56.8 cde 47.3 cde 44.7 de 45.6 de 45.7 ab 76.8 a 73.8 ab 76.7 a 74.1 ab 69.3 c 75.7 ab 73.3 b	Tree           41.0 a           41.0 a           39.2 a           38.7 a           31.4 a           35.9 a           36.8 a           36.0 a           29.4 b           28.2 bc           24.7 bcd           24.4 bcd           22.7 d           23.3 d           Cernel pounds per           Tree           23.6 a           22.6 ab           21.2 abc           22.3 ab           23.2 a           21.2 abc           23.8 a           20.1 abc           23.0 ab	4964 a 4962 a 4745 a 4683 a 4555 a 4342 a 4619 a 4460 a 4360 a 3554 b 3412 bc 2985 bcd 2985 bcd 2953 bcd 2953 bcd 2825 d 2825 d 283 abc 2695 ab 2811 a 2563 abc 2811 a 2563 abc 2811 a 2563 abc 2811 a 2563 abc 281 a 2783 ab	kernel yield (Ibs/acre)           19523 a           18878 ab           18767 abc           18593 abc           18443 abc           18050 bcd           17838 bcd           17750 cd           17757 e           14215 e           13918 e           132514 e           12054 f           11247           22384 a           21611 ab           21228 ab           21284 abc           20613 bc           20441 bc           20270 bc           19833 c
Chips         9008 b         0.92         75.3 ab         76.2 ab         18.2 bc         2201 bc         16416 d           Kahl         8830 b         1.05 fg         55.0 d         57.5 e         20.4 abc         2465 abc         15979 d           Marcona         6449 c         1.22 b         65.5 bcd         74.5 ab         17.4 c         2104 c         13351 c	Variety Nonpareil-Nico Nonpareil-3-8-2-70 Nonpareil-3-8-2-70 Nonpareil-Driver Nonpareil-Driver Nonpareil-5 Nonpareil-5 Nonpareil-5 Nonpareil-5 Winters Sweetheart Chips Kahl Marcona Kochi 2012 Variety Nonpareil-Nico Nonpareil-Nico Nonpareil-Nico Nonpareil-Newell Nonpareil-7 Nonpareil-5 Nonpareil-6 2-19e	18776 a         17744 abc         17790 abc         17943 ab         17078 abcd         15744 de         16630 bcde         18253 ab         16993 abcd         15979 cde         14969 e         11901 f         12420 f         9633 g         8701 g         9520 b         8530 b         8481 b         8606 b         9262 b         8090 bc         11507 a         7617 bc         8855 b	wt (g)           0.99 bcde           1.05 bc           1.00 bcd           0.88 bcde           0.83 e           1.04 bc           0.96 bcde           0.83 e           0.96 bcde           0.86 de           0.94 bcde           0.86 cde           0.94 bcde           0.89 cde           1.07 b           1.22 a           Average kernel wt (g)           1.13 de           1.20 bc           1.18 bcd           1.19 bcd           0.94           1.19 bcd           1.18 bcd	percentage           68.0 abc           70.7 a           70.1 ab           66.0 abcd           69.2 abc           70.4 ab           70.0 ab           64.1 bcde           60.3 de           53.5 f           30.8 g           63.5 cde           Shelling           percentage           67.7 bcd           70.9 bc           66.9 bcd           67.6 bcd           85.2 a           69.4 bcd           67.7 bcd	unit PAR int. 90.1 a 79.5 ab 69.4 abc 72.8 ab 72.3 ab 70.2 abc 74.7 ab 65.2 bcd 70.0 abc 56.8 cde 47.3 cde 44.7 de 45.6 de 45.7 ab 76.8 a 73.8 ab 76.7 a 74.1 ab 69.3 c 75.7 ab 73.3 b	Tree           41.0 a           41.0 a           39.2 a           38.7 a           31.4 a           35.9 a           36.8 a           36.0 a           29.4 b           28.2 bc           24.7 bcd           24.4 bcd           22.7 d           23.3 d           Cernel pounds per           Tree           23.6 a           22.6 ab           21.2 abc           22.3 ab           23.2 a           21.2 abc           23.8 a           20.1 abc           23.0 ab	4964 a 4962 a 4745 a 4683 a 4555 a 4342 a 4619 a 4460 a 4360 a 3554 b 3412 bc 2985 bcd 2985 bcd 2953 bcd 2953 bcd 2825 d 2825 d 283 abc 2695 ab 2811 a 2563 abc 2811 a 2563 abc 2811 a 2563 abc 2811 a 2563 abc 281 a 2783 ab	kernel yield (Ibs/acre)           19523 a           18878 ab           18767 abc           18593 abc           18443 abc           18050 bcd           17838 bcd           17750 cd           17757 e           14215 e           13918 e           132514 e           12054 f           11247           22384 a           21611 ab           21228 ab           21284 abc           20613 bc           20441 bc           20270 bc           19833 c
Kahl         8830 b         1.05 fg         55.0 d         57.5 e         20.4 abc         2465 abc         15979 d           Marcona         6449 c         1.22 b         65.5 bcd         74.5 ab         17.4 c         2104 c         13351 e	Variety Nonpareil-Nico Nonpareil-3-8-2-70 Nonpareil-3-8-2-70 Nonpareil-Driver Nonpareil-7 Nonpareil-5 Nonpareil-5 Nonpareil-3 Sweetheart Chips Kahl Marcona Kochi 2012 Variety Nonpareil-Nico Nonpareil-3-8-2-70 Nonpareil-5 Nonpareil-5 Nonpareil-5 Nonpareil-5 Nonpareil-6 2-19e Nonpareil-G	18776 a         17744 abc         17790 abc         17943 ab         17078 abcd         15744 de         16630 bcde         18253 ab         16993 abcd         18279 cde         14969 e         11901 f         12420 f         9633 g         8701 g         No. of nuts/tree         9520 b         8830 b         8481 b         8606 b         9262 b         8090 bc         11507 a         7617 bc         8855 b         8679 b	wt (g)           0.99 bcde           1.00 bcd           0.98 bcde           0.83 e           1.03 bc           1.04 bc           0.96 bcde           0.83 e           0.96 bcde           0.83 cde           0.96 bcde           0.89 cde           0.89 cde           1.07 b           1.07 b           1.13 de           1.22 a           Average kernel wt (g)           1.13 de           1.20 bc           1.15 cde           1.14 cde           1.19 bcd           0.94           0.94           0.19 bcd           1.18 bcd           1.18 bcd           1.18 bcd           1.18 bcd           1.18 bcd	percentage           68.0 abc           70.7 a           70.1 ab           66.0 abcd           69.2 abc           70.4 ab           70.0 ab           64.8 abcd           70.0 ab           64.4 abcd           70.0 ab           64.7 bcde           60.3 de           53.5 f           30.8 g           63.5 cde           Shelling           percentage           67.7 bcd           70.9 bc           66.9 bcd           85.2 a           69.0 bcd           85.2 a           69.0 bcd           69.0 bcd           69.4 bcd           67.7 bcd           61.9 bcd	unit PAR int. 90.1 a 79.5 ab 69.4 abc 72.8 ab 72.3 ab 70.2 abc 74.7 ab 65.2 bcd 70.0 abc 56.8 cde 47.3 cde 44.7 de 45.6 de 45.6 de 45.0 de 9.4 c Unit PAR int. 75.0 ab 76.8 a 73.8 ab 76.7 a 74.7 ab 69.3 c 75.7 ab 73.3 b 61.0 d	Tree           41.0 a           41.0 a           39.2 a           38.7 a           31.4 a           35.9 a           38.2 a           36.8 a           36.0 a           29.4 b           24.7 bcd           22.7 d           23.3 d           Cernel pounds per           Tree           23.6 a           22.6 ab           21.2 abc           23.2 a           21.2 abc           23.8 a           20.1 abc           23.0 ab           19.3 abc	4964 a 4962 a 4745 a 4683 a 4555 a 4342 a 4619 a 4460 a 3554 b 3412 bc 2985 bcd 2953 bcd 2953 bcd 2746 d 2825 d <b>Acre</b> 2861 a 27733 ab 2563 abc 2695 ab 2811 a 2563 abc 2881 a 2563 abc 2881 a 2563 abc 2881 a 2563 abc 2881 a 2432 abc 2783 ab 2338 abc	kernel yield (Ibs/acre)           19523 a           18878 ab           18878 ab           18878 ab           18878 ab           18878 ab           18593 abc           18433 abc           18050 bcd           17838 bcd           17760 cd           17750 cd           14757 e           14215 e           13918 e           13314 e           12054 ff           11247           vernel yield           (Ibs/acre)           22384 a           21611 ab           21329 ab           21254 abc           20613 bc           20613 bc           20441 bc           20270 bc           19833 c           17095 d
Marcona 6449 c 1.22 b 65.5 bcd 74.5 ab 17.4 c 2104 c 13351 e	Variety Nonpareil-Nico Nonpareil-Newell Nonpareil-Driver Nonpareil-Driver Nonpareil-7 Nonpareil-6 2-19e Nonpareil-6 2-19e Nonpareil-Jones Winters Sweetheart Chips Kahl Marcona Kochi 2012 Variety Nonpareil-Nico Nonpareil-Nico Nonpareil-Nico Nonpareil-Nico Nonpareil-Nice Nonpareil-Nice Nonpareil-Nice Nonpareil-S Nonpareil-6 2-19e Nonpareil-6 2-19e Nonpareil-S	18776 a         17744 abc         17790 abc         17943 ab         17078 abcd         15744 de         16630 bcde         18253 ab         16993 abcd         15979 cde         14969 e         11901 f         12420 f         9633 g         8701 g         No. of nuts/tree         9520 b         8530 b         8481 b         8606 b         9262 b         8090 bc         11507 a         7617 bc         8855 b         88653 b	wt (g)           0.99 bcde           1.05 bc           1.00 bcd           0.83 e           1.03 bc           1.04 bc           0.96 bcde           0.83 e           0.83 e           0.83 e           0.86 de           0.83 e           0.86 de           0.89 cde           0.89 cde           1.07 b           1.22 a           Average kernel           wt (g)           1.13 de           1.20 bc           1.15 cde           1.18 bcd           1.19 bcd           1.19 bcd           1.18 bcd           1.19 bcd           1.01 bcd	percentage           68.0 abc           70.7 a           70.1 ab           66.0 abcd           69.2 abc           70.4 ab           70.0 ab           64.8 abcd           70.0 ab           64.8 abcd           70.0 ab           63.7 ef           64.1 bcde           60.3 de           53.7 ef           30.8 g           63.5 cde           Shelling percentage           67.7 bcd           70.9 bc           66.9 bcd           67.6 bcd           85.2 a           69.0 bcd           59.6 cd           69.0 bcd           67.7 bcd           67.7 bcd           67.7 bcd           67.6 cd           69.0 bcd           69.0 bcd           69.4 bcd           67.7 bcd           61.9 bcd           63.4 bcd           67.7 bcd           61.9 bcd	unit PAR int.           90.1 a           79.5 ab           69.4 abc           72.8 ab           72.3 ab           70.2 abc           74.7 ab           65.2 bcd           70.0 abc           56.8 cde           47.3 cde           44.7 de           45.6 de           9.4 ce           9.4 ce           9.4 ce           75.6 ab           76.7 a           77.8 ab           76.7 a           74.1 ab           69.3 c           75.7 ab           73.3 b           61.0 d           68.5 c	Tree           41.0 a           41.0 a           39.2 a           38.7 a           31.4 a           35.9 a           38.2 a           36.8 a           36.0 a           29.4 b           28.2 bc           24.7 bcd           24.7 bcd           22.7 d           23.3 d           36.6 a           22.7 d           23.3 d           21.2 abc           22.6 ab           21.2 abc           23.3 a           21.2 abc           23.3 a           20.1 abc           23.0 ab           19.3 abc           21.0 abc	4964 a 4962 a 4745 a 4683 a 4555 a 4342 a 4619 a 4460 a 4360 a 3554 b 3412 bc 2985 bcd 2985 bcd 2953 bcd 2953 bcd 2953 bcd 2953 bcd 27746 d 2825 d <b>Acre</b> 2861 a 2733 ab 2563 abc 2695 ab 2695 ab 2695 ab 2811 a 2763 abc 2695 ab 2811 a 27783 ab 2811 a 2563 abc 2811 a 27783 ab	kernel yield (Ibs/acre)           19523 a           18878 ab           18767 abc           18593 abc           18800 bcd           17838 bcd           17838 bcd           17838 bcd           17750 cd           17750 cd           14215 e           13918 e           13314 e           12054 f           11247           22384 a           21611 ab           21329 ab           21254 abc           20613 bc           20441 bc           20270 bc           19833 c           17095 d
	Variety Nonpareil-Nico Nonpareil-3-8-2-70 Nonpareil-3-8-2-70 Nonpareil-Driver Nonpareil-Driver Nonpareil-5 Nonpareil-5 Nonpareil-5 Nonpareil-5 Nonpareil-5 Winters Sweetheart Chips Kahl Marcona Kochi 2012 Variety Nonpareil-Nico Nonpareil-Nico Nonpareil-Nico Nonpareil-Nico Nonpareil-Newell Nonpareil-7 Nonpareil-5 Nonpareil-5 Nonpareil-6 2-19e Nonpareil-Jones Winters Sweetheart Chips	18776 a         17744 abc         17790 abc         17943 ab         17078 abcd         15744 de         16630 bcde         18253 ab         16993 abcd         15979 cde         14969 e         11901 f         12420 f         9633 g         8701 g         8701 g         8530 b         8481 b         8606 b         9262 b         8090 bc         11507 a         7617 bc         8855 b         8679 b         8653 b         9008 b	wt (g)           0.99 bcde           1.05 bc           1.00 bcd           0.83 e           1.03 bc           1.04 bc           0.96 bcde           0.83 e           0.96 bcde           0.83 e           0.86 de           0.87 bcde           0.88 cde           0.94 bcde           0.89 cde           1.07 b           1.22 a           Average kernel wt (g)           1.13 de           1.20 bc           1.15 cde           1.18 bcd           1.14 cde           1.19 bcd           1.18 bcd           1.18 bcd           1.19 bcd           1.18 bcd           1.01 cf	percentage           68.0 abc           70.7 a           70.1 ab           66.0 abcd           69.2 abc           70.4 ab           70.0 ab           64.8 abcd           70.0 ab           64.4 abcd           60.3 de           53.5 cf           30.8 cf           66.9 bcd           67.7 bcd           70.9 bc           66.9 bcd           67.6 bcd           59.6 cd           69.0 bcd           69.4 bcd           67.7 bcd           69.4 bcd           69.4 bcd           67.7 bcd           67.7 bcd           70.9 bc           66.9 bcd           67.7 bcd           69.0 bcd           69.4 bcd           67.7 bcd           61.9 bcd           67.7 bcd      67.3 ab <td>unit PAR int. 90.1 a 79.5 ab 69.4 abc 72.8 ab 72.8 ab 70.2 abc 74.7 ab 65.2 bcd 70.0 abc 56.8 cde 47.3 cde 47.3 cde 44.6 de 45.6 de 45.6 de 45.6 de 45.0 de 9.4 c 9.4 c 9.3 c 75.6 ab 76.8 a 76.8 a 76.7 a 77.7 ab 73.3 b 61.0 d 68.5 c 76.2 ab</td> <td>Tree           41.0 a           39.2 a           38.7 a           31.4 a           35.9 a           38.2 a           36.8 a           36.0 a           29.4 b           24.7 bcd           24.4 bcd           22.7 d           23.3 d           36.6 a           22.7 d           23.3 d           36.6 a           22.7 d           23.3 d           22.7 d           23.3 d           22.3 a           21.2 abc           23.6 a           22.6 ab           21.2 abc           23.8 a           20.1 abc           23.0 ab           19.3 abc           21.0 abc           18.2 bc</td> <td>4964 a 4962 a 4745 a 4683 a 4555 a 4342 a 4619 a 4460 a 4360 a 3554 b 3412 bc 2985 bcd 2985 bcd 2985 bcd 2985 bcd 2985 bcd 2825 d 2825 d 2861 a 2733 ab 2563 abc 28911 a 2563 abc 2891 a 2811 a 2563 abc 2811 a 2432 abc 2811 a 2563 abc 2783 ab 2338 abc 2538 abc 2201 bc</td> <td>kernel yield (Ibs/acre)           19523 a           18878 ab           18767 abc           18593 abc           18878 ab           18767 abc           18593 abc           18443 abc           18050 bcd           17838 bcd           17750 c           14215 e           13918 e           13514 e           12054 f           11247           22384 a           21611 ab           21329 ab           21254 abc           20613 bc           20441 bc           20270 bc           19833 c           17095 d           16456 d           16416 d</td>	unit PAR int. 90.1 a 79.5 ab 69.4 abc 72.8 ab 72.8 ab 70.2 abc 74.7 ab 65.2 bcd 70.0 abc 56.8 cde 47.3 cde 47.3 cde 44.6 de 45.6 de 45.6 de 45.6 de 45.0 de 9.4 c 9.4 c 9.3 c 75.6 ab 76.8 a 76.8 a 76.7 a 77.7 ab 73.3 b 61.0 d 68.5 c 76.2 ab	Tree           41.0 a           39.2 a           38.7 a           31.4 a           35.9 a           38.2 a           36.8 a           36.0 a           29.4 b           24.7 bcd           24.4 bcd           22.7 d           23.3 d           36.6 a           22.7 d           23.3 d           36.6 a           22.7 d           23.3 d           22.7 d           23.3 d           22.3 a           21.2 abc           23.6 a           22.6 ab           21.2 abc           23.8 a           20.1 abc           23.0 ab           19.3 abc           21.0 abc           18.2 bc	4964 a 4962 a 4745 a 4683 a 4555 a 4342 a 4619 a 4460 a 4360 a 3554 b 3412 bc 2985 bcd 2985 bcd 2985 bcd 2985 bcd 2985 bcd 2825 d 2825 d 2861 a 2733 ab 2563 abc 28911 a 2563 abc 2891 a 2811 a 2563 abc 2811 a 2432 abc 2811 a 2563 abc 2783 ab 2338 abc 2538 abc 2201 bc	kernel yield (Ibs/acre)           19523 a           18878 ab           18767 abc           18593 abc           18878 ab           18767 abc           18593 abc           18443 abc           18050 bcd           17838 bcd           17750 c           14215 e           13918 e           13514 e           12054 f           11247           22384 a           21611 ab           21329 ab           21254 abc           20613 bc           20441 bc           20270 bc           19833 c           17095 d           16456 d           16416 d
Kochi 2025 d 1.41 a 26.0 e 60.0 de 6.3 d 763 d 12816 e	Variety Nonpareil-Nico Nonpareil-3-8-2-70 Nonpareil-Newell Nonpareil-Driver Nonpareil-7 Nonpareil-5 Nonpareil-6 2-19e Winters Sweetheart Chips Kahl Marcona Kochi 2012 Variety Nonpareil-Nico Nonpareil-Nico Nonpareil-2-70 Nonpareil-2-70 Nonpareil-7 Nonpareil-5 Nonpareil-5 Nonpareil-6 2-19e Nonpareil-5 Nonpa	18776 a         17744 abc         17790 abc         17943 ab         17078 abcd         15744 de         16630 bcde         18253 ab         16993 abcd         18979 cde         14969 e         11901 f         12420 f         9633 g         8701 g         9520 b         8530 b         8481 b         8606 b         9262 b         8090 bc         11507 a         7617 bc         8855 b         8679 b         8830 b	wt (g)           0.99 bcde           1.00 bcd           0.98 bcde           0.83 e           1.03 bc           1.04 bc           0.96 bcde           0.83 e           0.96 bcde           0.83 e           0.96 bcde           0.86 de           0.94 bcde           0.89 ccde           1.07 b           1.22 a           Average kernel wt (g)           1.13 de           1.20 bc           1.15 cde           1.18 bcd           1.19 bcd           0.94           1.19 bcd           0.94           1.19 bcd           0.94           1.19 bcd           0.94           1.01           1.00	percentage           68.0 abc           70.7 a           70.1 ab           66.0 abcd           69.2 abc           70.4 ab           70.0 ab           64.8 abcd           70.0 ab           64.4 abcd           70.0 ab           64.7 bcde           60.3 de           53.5 f           30.8 g           63.5 cde           Shelling           percentage           67.7 bcd           70.9 bc           66.9 bcd           67.6 bcd           85.2 a           69.0 bcd           67.7 bcd           67.7 bcd           67.7 bcd           67.7 bcd           67.7 bcd           69.0 bcd           67.7 bcd           67.7 bcd           69.4 bcd           67.7 bcd           61.9 bcd           67.7 bcd           61.9 bcd           67.8 acd           75.3 ab	unit PAR int. 90.1 a 79.5 ab 69.4 abc 72.8 ab 72.3 ab 70.2 abc 74.7 ab 65.2 bcd 70.0 abc 56.8 cde 47.3 cde 44.7 de 45.6 de 45.6 de 45.0 de 9.4 c <b>Unit PAR int.</b> 75.0 ab 76.8 a 76.8 a 76.7 a 74.1 ab 69.3 c 75.7 ab 76.7 a 74.1 ab 69.3 c 76.7 a 76.7 a 76.7 a 76.7 a 76.7 a 76.2 ab 57.5 e	Tree           41.0 a           39.2 a           38.7 a           31.4 a           35.9 a           38.2 a           36.8 a           36.8 a           36.0 a           29.4 b           28.2 bc           24.4 bcd           22.7 d           23.3 d           Cernel pounds per           Tree           23.6 a           22.3 ab           22.3 ab           23.2 a           21.2 abc           23.8 a           20.1 abc           23.0 ab           19.3 abc           21.0 abc           18.2 bc           20.4 abc	4964 a 4962 a 4745 a 4683 a 4555 a 4342 a 4619 a 4460 a 4360 a 3554 b 3412 bc 2985 bcd 2953 bcd 2746 d 2861 a 2733 ab 2563 abc 2695 ab 2881 a 2563 abc 2695 ab 2811 a 2563 abc 2881 a 2563 abc 2783 ab 2338 abc 2538 abc	kernel yield (Ibs/acre)           19523 a           18878 ab           18767 abc           18593 abc           18600 bcd           17838 bcd           17838 bcd           17838 bcd           17838 bcd           17838 bcd           17750 cd           17750 cd           14757 e           14215 e           13918 e           13514 e           12054 f           11247           kernel yield           (Ibs/acre)           22384 a           21611 ab           21329 ab           21254 abc           20613 bc           20613 bc           20270 bc           19833 c           17095 d           16456 d           16456 d           16457 d
	Variety Nonpareil-Nico Nonpareil-Newell Nonpareil-Driver Nonpareil-Driver Nonpareil-Toriver Nonpareil-S Nonpareil-S Nonpareil-S Winters Sweetheart Chips Kahl Marcona Kohi <b>2012</b> Variety Nonpareil-Nico Nonpareil-S Nonpareil	18776 a         17744 abc         17790 abc         17943 ab         17078 abcd         15744 de         16630 bcde         18253 ab         16993 abcd         18279 cde         14969 e         11901 f         12420 f         9833 g         8701 g         8530 b         8830 b         8830 b         8855 b         8855 b         88679 b         8853 b         9008 b         8830 b	wt (g)           0.99 bcde           1.05 bc           1.00 bcd           0.83 e           1.03 bc           1.04 bc           0.96 bcde           0.96 bcde           0.96 bcde           0.83 e           0.96 bcde           0.83 e           0.94 bcde           0.89 cde           1.07 b           1.22 a           Average kernel           wt (g)           1.13 de           1.20 bc           1.18 bcd           1.19 bcd           1.19 bcd           1.19 bcd           1.10 ef           0.92           1.05 fg           1.22 b	percentage           68.0 abc           70.7 a           70.1 ab           66.0 abcd           69.2 abc           70.4 ab           70.0 ab           64.8 abcd           70.0 ab           64.8 abcd           70.0 ab           58.7 ef           64.1 bcde           60.3 de           53.5 cde           Shelling percentage           67.7 bcd           70.9 bc           66.9 bcd           67.6 bcd           85.2 a           69.0 bcd           59.6 cd           67.7 bcd           67.7 bcd           67.6 bcd           85.2 a           69.0 bcd           69.6 cd           69.7 bcd           67.7 bcd <t< td=""><td>unit PAR int.           90.1 a           79.5 ab           69.4 abc           72.8 ab           72.3 ab           70.2 abc           74.7 ab           65.2 bcd           70.0 abc           56.8 cde           47.3 cde           44.7 de           45.6 de           9.4 ce           65.6 ab           75.6 ab           76.7 a           74.1 ab           69.3 c           75.7 ab           73.3 b           61.0 d           68.5 c           76.2 ab           57.5 e           74.5 ab</td><td>Tree           41.0 a           41.0 a           39.2 a           38.7 a           31.4 a           35.9 a           38.2 a           36.8 a           36.0 a           29.4 b           28.2 bc           24.7 bcd           22.7 d           23.3 d           Cernel pounds per           Tree           23.6 a           22.6 ab           21.2 abc           23.3 a           21.2 abc           23.8 a           20.1 abc           23.0 ab           19.3 abc           21.0 abc           18.2 bc           20.4 abc           21.0 abc           18.2 bc           20.4 abc           17.4 c</td><td>4964 a 4962 a 4745 a 4683 a 4555 a 4342 a 4619 a 4460 a 3554 b 3455 bc 2985 bcd 2953 bcd 2953 bcd 2746 d 2825 d 2746 d 2746 d 2753 ab 2811 a 2563 abc 2811 a 2563 abc 2811 a 2563 abc 2811 a 2563 abc 2811 a 2563 abc 2811 a 2563 abc 27783 ab 2338 abc 2538 abc 2201 bc 2465 abc 2201 bc 2465 abc 22104 c</td><td>kernel yield (Ibs/acre)           19523 a           18878 ab           18767 abc           18593 abc           18878 ab           18593 abc           18878 ab           18593 abc           18593 abc           186050 bcd           17838 bcd           17750 cd           17750 cd           14757 e           14215 e           13918 e           12054 f           11247           22384 a           221611 ab           21254 abc           20613 bc           20613 bc           20441 bc           20270 bc           19833 c           17095 d           16456 d           16456 d           16456 d           16456 d           15979 d           13351 e</td></t<>	unit PAR int.           90.1 a           79.5 ab           69.4 abc           72.8 ab           72.3 ab           70.2 abc           74.7 ab           65.2 bcd           70.0 abc           56.8 cde           47.3 cde           44.7 de           45.6 de           9.4 ce           65.6 ab           75.6 ab           76.7 a           74.1 ab           69.3 c           75.7 ab           73.3 b           61.0 d           68.5 c           76.2 ab           57.5 e           74.5 ab	Tree           41.0 a           41.0 a           39.2 a           38.7 a           31.4 a           35.9 a           38.2 a           36.8 a           36.0 a           29.4 b           28.2 bc           24.7 bcd           22.7 d           23.3 d           Cernel pounds per           Tree           23.6 a           22.6 ab           21.2 abc           23.3 a           21.2 abc           23.8 a           20.1 abc           23.0 ab           19.3 abc           21.0 abc           18.2 bc           20.4 abc           21.0 abc           18.2 bc           20.4 abc           17.4 c	4964 a 4962 a 4745 a 4683 a 4555 a 4342 a 4619 a 4460 a 3554 b 3455 bc 2985 bcd 2953 bcd 2953 bcd 2746 d 2825 d 2746 d 2746 d 2753 ab 2811 a 2563 abc 2811 a 2563 abc 2811 a 2563 abc 2811 a 2563 abc 2811 a 2563 abc 2811 a 2563 abc 27783 ab 2338 abc 2538 abc 2201 bc 2465 abc 2201 bc 2465 abc 22104 c	kernel yield (Ibs/acre)           19523 a           18878 ab           18767 abc           18593 abc           18878 ab           18593 abc           18878 ab           18593 abc           18593 abc           186050 bcd           17838 bcd           17750 cd           17750 cd           14757 e           14215 e           13918 e           12054 f           11247           22384 a           221611 ab           21254 abc           20613 bc           20613 bc           20441 bc           20270 bc           19833 c           17095 d           16456 d           16456 d           16456 d           16456 d           15979 d           13351 e

**Table 4.** Number of nuts per tree, average kernel weight, shelling percentage, kernel pounds per unit of photosynthetically active radiation (PAR) intercepted, kernel pound per acre, cumulative kernel pounds per acre for the 2013 and 2014 seasons. Data for each year is sorted by cumulative yield, which is summed from the beginning of the project. Selection 2-19e was recently released as Kester. Letters indicate significant difference at the 5% level of significance.

2013		Average kernel wt	Shelling		Kernel pounds per		Cumulative kernel yield
Variety	No. of nuts/tree	(g)	percentage	unit PAR int.	Tree	Acre	(lbs/acre)
Nonpareil-Nico	20367 a	0.87 b	63.5 a	61.6 a	39.2 a	4738 a	27121 a
Nonpareil-3-8-2-70	18718 b	0.87 b	63.5 ab	56.5 ab	36.0 a	4354 a	25965 ab
Nonpareil-Newell	19539 ab	0.87 b	63.5 ab	58.0 ab	37.6 a	4545 a	25874 ab
Nonpareil-Driver	19539 ab	0.87 b	63.5 ab	60.2 a	37.4 a	4529 a	25817 ab
Nonpareil-7	19439 ab	0.87 b	63.5 ab	58.6 ab	37.4 a	4522 a	25776 ab
Nonpareil-5	18202 b	0.87 b	63.5 ab	55.4 ab	35.0 a	4234 a	24847 bc
Nonpareil-6	18769 b	0.87 b	63.5 ab	56.8 ab	36.1 a	4366 a	24636 bc
Nonpareil-Jones	18241 b	0.87 b	63.5 ab	54.7 ab	35.1 a	4243 a	24076 c
2-19e	16267 c	0.66 c	56.6 b	44.0 cd	23.9 c	2890 c	22958 c
Winters	13894 d	0.86 b	55.6 b	50.3 bc	26.5 bc	3201 bc	20296 d
Kahl	15587 c	0.85 b	55.3 b	57.9 ab	29.1 b	3524 b	19503 d
Chips	12689 d	0.89 b	57.3 b	39.7 de	24.9 bc	3010 bc	19466 d
Sweetheart	13943 d	0.78 b	66.5 a	40.4 de	24.0 c	2902 c	19318 d
Marcona	10858	1.11 a	28.9	49.4 bc	26.5 bc	3206 bc	16023 e
Kochi	7911	1.09 a	63.7 ab	33.5	19.0 d	2300 d	15651 e

2014					Kernel pounds per		Cumulative kernel yield
Variety	No. of nuts/tree	Average kernel wt (g)	Shelling percentage	unit PAR int.	Tree	Acre	(lbs/acre)
Nonpareil-Nico	15387 b	0.91 de	70.1 bc	57.0 b	37.0 ab	4476 ab	31379 a
Nonpareil-3-8-2-70	15105 b	1.12 bcd	70.5 bc	57.6 b	37.4 ab	4522 ab	30486 ab
Nonpareil-Newell	14172 bc	1.12 bcd	69.8 bc	51.9 bc	34.8 ab	4208 ab	30082 abc
Nonpareil-Driver	13082 bcd	1.15 bc	70.3 bc	51.2 bc	33.1 b	4007 b	29824 bcd
Nonpareil-7	14201 bc	1.12 bcd	70.4 bc	52.1 bc	34.9 ab	4224 ab	29467 bcd
Nonpareil-5	14523 bc	1.15 bc	71.7 b	57.6 b	36.8 ab	4450 ab	29297 bcd
Nonpareil-6	13930 bc	1.13 bcd	69.5 bcd	52.8 bc	34.7 ab	4195 ab	28831 cd
Nonpareil-Jones	16267 c	0.86 e	57.6 d	48.4 bc	32.2 b	3901 b	28584 d
2-19e	14378 bc	0.92 cde	69.5 bcd	49.1 bc	29.1 bc	3616 bc	27075 е
Winters	17427 a	0.91 de	77.1 a	67.0 a	35.0 ab	4237 ab	24532 f
Chips	11188 cde	0.98 cde	67.7 bcd	39.9 cd	23.9 cd	2886 cd	22353 g
Kahl	9310 e	1.03 bcde	55.3 e	40.6 cd	21.0 d	2543 d	22046 g
Sweetheart	10145 de	0.92 cde	66.7 cd	31.5 d	20.5 d	2477 d	21794 g
Kochi	5981 f	1.25 b	66.8 cd	26.4 d	16.5 d	1996 d	17646 h
Marcona	1721 g	1.48 a	57.6 e	10.3 e	5.6 e	682 e	16705 h

2015					Kernel pounds per		Cumulative kernel yield
Variety	No. of nuts/tree	Average kernel wt (g)	Shelling percentage	unit PAR int.	Tree	Acre	(lbs/acre)
Nonpareil-Nico	12982 abc	1.07 bc	68.6 ab	46.5 ab	30.8 ab	3728 ab	35046 a
Nonpareil-3-8-2-70	11502 de	1.10 b	71.3 a	41.8 bcd	27.9 bc	3383 bc	33870 ab
Nonpareil-Newell	12638 bcd	1.10 b	72.8 a	44.2 abcd	30.5 ab	3702 ab	33784 ab
Nonpareil-Driver	12664 bcd	1.07 bc	72.8 a	45.1 abc	29.9 ab	3623 ab	33447 bc
Nonpareil-7	14058 a	1.01 cd	73.9 a	46.1 ab	31.3 a	3797 a	33222 bcd
Nonpareil-5	11025 e	1.11 b	72.6 a	40.7 cde	26.9 c	3263 c	32560 bcd
Nonpareil-Jones	13579 ab	1.00 d	69.5 ab	45.1 abc	30.2 ab	3659 ab	32286 cd
Nonpareil-6	11439 de	1.06 bcd	71.0 a	40.0 cde	26.8 c	3246 c	32077 d
2-19e	7827 g	0.94 e	52.5 e	25.0 g	16.2 e	1965 e	29086 e
Winters	5464 h	1.06 bcd	62.1 cd	22.6 gh	12.7 f	1542 f	26075 f
Chips	11843 cde	0.89 ef	57.4 d	37.2 ef	23.1 d	2806 d	25159 f
Kahl	13661 ab	0.84 f	58.4 d	47.9 a	25.4 cd	3081 cd	25127 f
Sweetheart	6953 g	0.86 f	64.9 bc	20.0 h	13.2 f	1607 f	23402 g
Kochi	9506 f	1.08 b	65.3 bc	35.8 f	22.7 d	2758 d	20404 h
Marcona	2798 i	1.27 a	26.2 f	13.2 i	7.7 g	943 g	17548 i

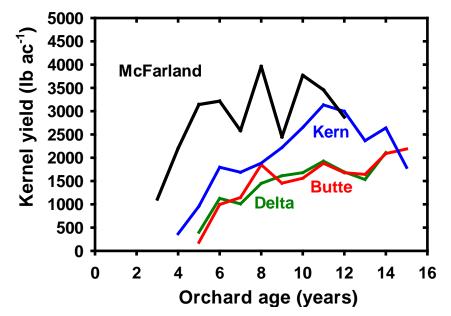
**Table 5.** Varieties and selections planted at the next generation regional almond variety trials. Items 1-31 are planted at all 3 sites while additional material planted at individual sites is listed at the end. Trees at the Butte, Stanislaus and Madera sites were planted on Krymsk 86, Nemaguard and Hansen 536 rootstock respectively (exceptions are noted at bottom of table).

#	Variety or selection	Self-fertile*	Source	Provides bud wood
1	Eddie		Bright's	Bright's
2	Capitola		Burchell	Burchell
3	Supareil		Burchell	Burchell
4	P15.044	yes	Burchell	Burchell
5	P10.001	yes	Burchell	Burchell
6	Booth		Burchell	Burchell
7	Sterling		Burchell	Burchell
8	Bennett		Duarte	Duarte
9	Nonpareil		Fowler	Fowler
10	Durango		Fowler	Fowler
11	Jenette		Fowler	Fowler
12	Marcona		Spain	Gradziel
13	Winters	partial	UCD	Fowler
14	Sweetheart	partial	UCD	Fowler
15	Kester (2-19E)		UCD	Gradziel
16	UCD3-40		UCD	Gradziel
17	UCD18-20		UCD	Gradziel
18	UCD1-16		UCD	Gradziel
19	UCD8-160	yes	UCD	Gradziel
20	UCD8-27	yes	UCD	Gradziel
21	UCD1-271	yes	UCD	Gradziel
22	UCD1-232	yes	UCD	Gradziel
23	UCD7-159	yes	UCD	Gradziel
24	UCD8-201	yes	UCD	Gradziel
25	Y121-42-99	yes	USDA	Ledbetter
26	Y117-86-03	yes	USDA	Ledbetter
27	Y116-161-99	yes	USDA	Ledbetter
28	Y117-91-03	yes	USDA	Ledbetter
29	Folsom		Wilson	Wilson
30	Aldrich			Fowler

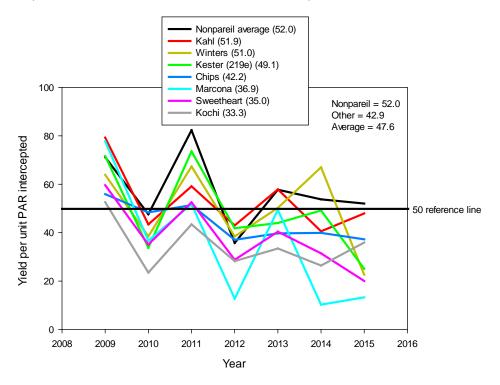
\* of the thirty-two varieties in the main trials fourteen are either partially or fully self-fertile (as is Lonestar- see below) Additional items

Chico site- Wood Colony on Kyrmsk 86, one rep of Lone Star (self-fertile) on Krymsk 86 Madera site- Lonestar (self-fertile) on Hanson 536

Butte and Stanislaus sites- Kester on Hanson 531 in addition to on normal site rootstock Stanislaus site- one rep of Lonestar (self-fertile) on Nemaguard



**Figure. 1**. Average yield for all varieties, selections and Nonpareil sources by orchard age for the 1993 Butte, Delta and Kern Regional Variety Trials as well as the McFarland Variety Trial that was planted in 2004. Number in parenthesis after trial name is number of trees per acre.



**Figure 2.** Yield per unit PAR intercepted by variety and year (kernel pounds per 1% light intercepted). Number following variety name in legend indicates the average from 2009 to 2015. Average for all varieties and years was 47.6. A value of 50 is what we have found the best orchards can average over several years.

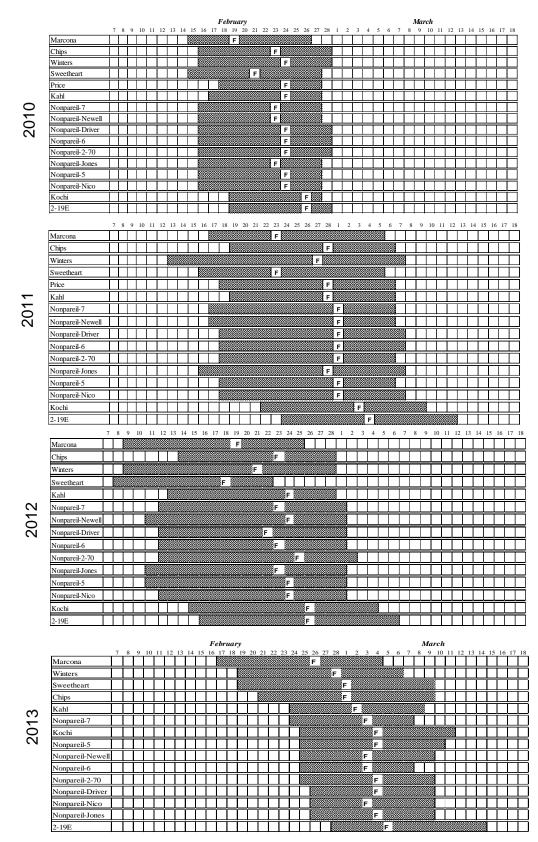
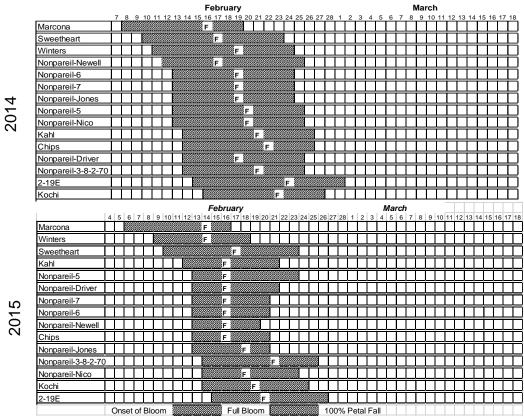
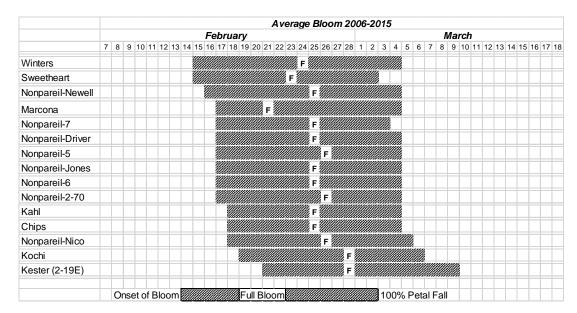


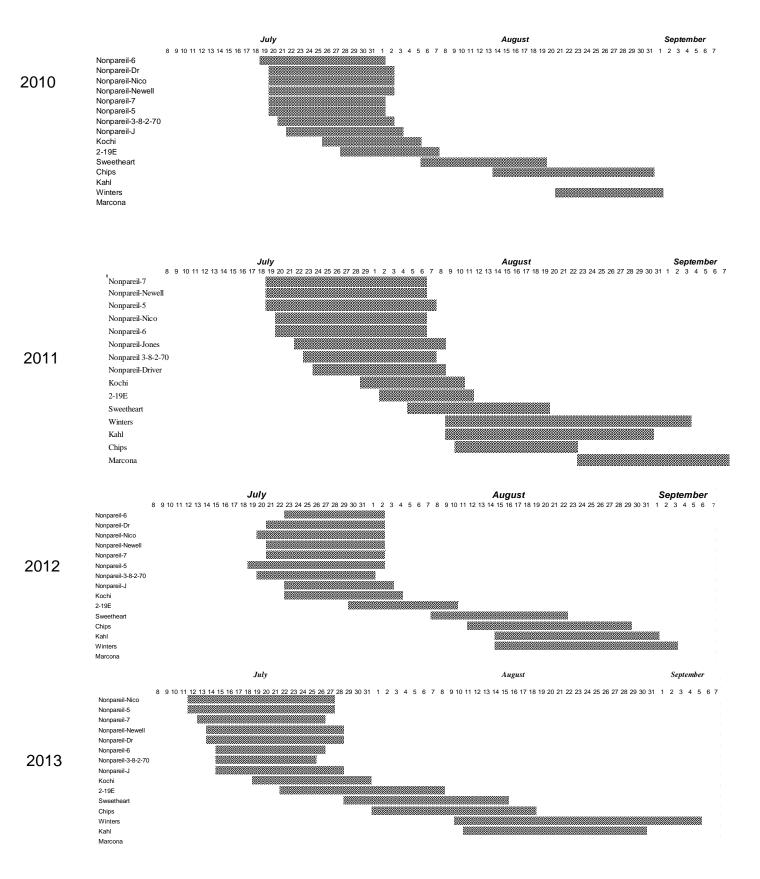
Figure 3. Bloom data for the McFarland Trial for the 2010-2013 seasons. Cross hatched area indicates onset of bloom to 100% petal fall. "F" indicates full bloom.



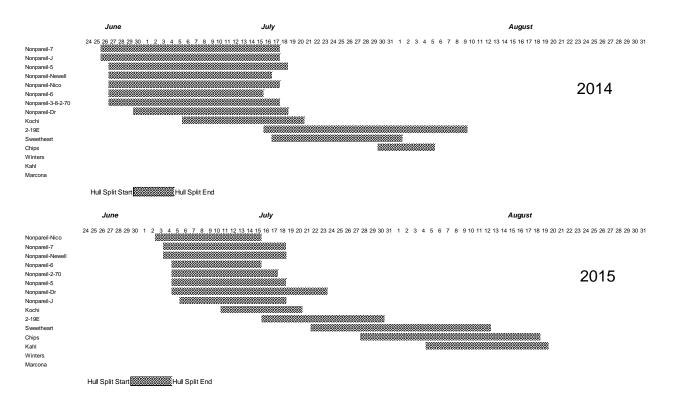
**Figure 4.** Bloom data for the McFarland Trial for the 2014-2015 seasons. Cross hatched area indicates onset of bloom to 100% petal fall. "F" indicates full bloom.



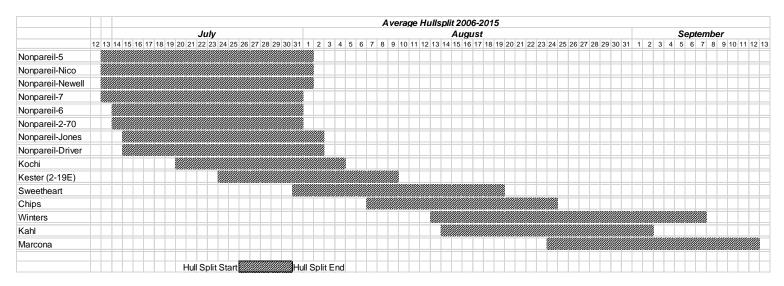
**Figure 5**. Average bloom data (2006 to 2015) for the McFarland Trial. Cross hatched area indicates onset of bloom to 100% petal fall. "F" indicates full bloom.



**Figure 6**. Hullsplit progression by variety and Nonpareil source for the 2010-2013 seasons at the McFarland trial.



**Figure 7.** Hullsplit progression by variety and Nonpareil source for 2014 and 2015 seasons at the McFarland trial.



**Figure 8**. Average hullsplit progression by variety and Nonpareil source for the 2006 to 2015 seasons at the McFarland trial.