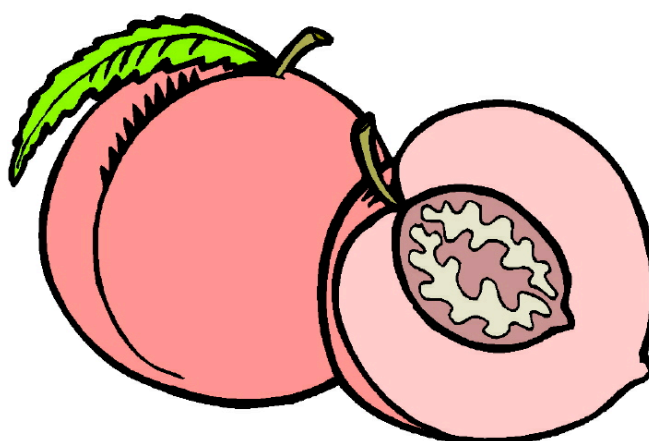

UNIVERSITY OF CALIFORNIA COOPERATIVE EXTENSION

2011

SAMPLE COSTS TO ESTABLISH AND PRODUCE

Processing Peaches

Cling and Freestone Late Harvested Varieties



**SACRAMENTO VALLEY
and
SAN JOAQUIN VALLEY**

Prepared by

Maxwell Norton

Janine Hasey

Roger Duncan

Karen M. Klonsky

Richard L. De Moura

UC Cooperative Extension Farm Advisor, Merced County

UC Cooperative Extension Farm Advisor, Sutter/Yuba Counties

UC Cooperative Extension Farm Advisor, Stanislaus County

UC Cooperative Extension Economist, Department of Agricultural and Resource Economics, UC Davis

Staff Research Associate, Department of Agricultural and Resource Economics, UC Davis

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Cling and Freestone Late Harvested Varieties
SACRAMENTO VALLEY and SAN JOAQUIN VALLEY – 2011**

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INTRODUCTION

Sample costs to produce late harvested varieties of processing peaches in the Sacramento and San Joaquin Valleys are presented in this study. This study is intended as a guide only, and can be used to make production decisions, determine potential returns, prepare budgets and evaluate production loans. Practices described are based on production practices considered typical for the crop and area, but will not apply to every situation. Sample costs for labor, materials, equipment and custom services are based on current figures. A blank column, “Your Costs”, in Tables 2 and 3 is provided to enter your costs.

The hypothetical farm operation, production practices, overhead, and calculations are described under the assumptions. For additional information or an explanation of the calculations used in the study call the Department of Agricultural and Resource Economics, University of California, Davis, or your local UC Cooperative Extension office.

Sample Cost of Production Studies for many commodities can be downloaded at <http://coststudies.ucdavis.edu>, requested through the Department of Agricultural and Resource Economics, UC Davis, or obtained from county UC Cooperative Extension offices.

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Assumptions

The assumptions refer to Tables 1 to 8 and pertain to sample costs to produce late harvested varieties of processing peaches (cling and freestone) in the Sacramento and San Joaquin Valleys. **Practices described may not be University of California recommendations, but represent production practices and materials considered typical of a well-managed orchard in the region.** The costs, materials, and practices shown in this study serve only as a sample or guide and will not apply to all situations. Production cultural practices vary by grower and the differences can be significant. **The use of trade names and cultural practices in this report does not constitute an endorsement or recommendation by the University of California nor is any criticism implied by omission of other similar products.**

Land. The hypothetical farm consists of 100 contiguous acres. Production costs are based on the 40 acres planted to a late harvested variety of cling peach. The remaining acreage is in other mature tree crops. The grower owns and farms the orchard. Land is valued at \$11,000 per acre.

Establishment Cultural Practices and Material Inputs (Table 1)

Orchard Removal. Orchard removal includes tree removal and cleanup. The irrigation hoses are rolled up and removed, trees removed, then chiseled once with a clod breaker attached, root and pipe removal followed by discing twice.

Land Preparation. The orchard is established on ground previously planted to another tree crop. The land is assumed to be well drained and either a class I or II soil. Growers should have nematode sampling done before deciding whether to fumigate. The site is ripped, chiseled once, more root and pipe removal and disced twice to break up any hardpan and to pulverize large clods. The ground is laser leveled to remove high and low spots to allow for efficient irrigation. Tree rows are strip fumigated with Telone II to treat for nematodes. Tree holes are dug by a backhoe service, though this is not the standard practice in some regions such as the Sacramento Valley. Subsequently, berms are made in the tree rows. All land preparation operations are contracted and done in the year prior to planting with the costs shown in the first year.

Trees. No specific variety is planted in this study, except that it is a late variety of cling (or freestone) peaches delivered for processing. The trees are planted on 16 X 18 foot spacing, 151 trees per acre. Royalty costs are included in the tree price. The life of the orchard at the time of planting is 18 years.

Plant, Train, Prune. Planting starts by surveying and marking tree sites. Trees are planted in January through March on berms, then pruned, painted and covered with tree protectors. The protectors are placed around the trees for protection from above ground rodents and herbicide sprays, while painting protects against sunburn and borers. Pruning, training and suckering begins in the first year. Summer pruning begins in June of the third year.

Fruit Thinning. Cling peaches usually set excessive fruit and need to be thinned to increase fruit size. Timing and method of thinning are crucial to producing a good crop. The variety and weather play a role in determining the proper thinning time. Normally, the earlier the thinning is done, the greater the increase in fruit size. Thinning begins in the first year of fruit set and in this study begins in the third year in May and/or June. Thinning is done mechanically, chemically, or by hand with hand thinning being the most common. Hand thinning is used in this study.

Roping and Wiring Trees. Peach trees are susceptible to limb breakage due to vigorous shoot growth and heavy fruit loads. Besides pruning and thinning, ropes or wires are wrapped around the perimeter of the tree to support the branches and reduce breakage from heavy loads. Nylon rope is typically used to wrap the trees from the third through fifth year. The rope is replaced with wire in the sixth year and left permanently around the tree.

Irrigation. The water is supplied by an irrigation district. The price varies by district and by region. In this study, district water costs \$2.74 per acre inch. The low volume irrigation system is laid out on the berms prior to planting and the cost is included in the overall system costs shown in Non-Cash Overhead Investments. The annual water requirements assumed in this study are shown in Table A. Post harvest irrigations through mid September are essential. Water costs can be affected by district, well and weather (rainfall, frost protection).

| Year | Acre Inch |
|------|-----------|
| 1 | 12 |
| 2 | 18 |
| 3 | 24 |
| 4 | 30 |
| 5 | 36 |
| 6 | 42 |

Fertilize. Nitrogen (N) is applied for tree growth. In the first year an NPK fertilizer (15-15-15) is hand applied three times (April, June, July) around the trees. Beginning in the second year, liquid fertilizers are applied through the micro system. Equal amounts of N are applied as CAN17 in April, UN32 in June and August in the second year. In the following years, UN32 is injected in three equal applications.

| Year | N per acre |
|------|------------|
| 1 | 15 |
| 2 | 30 |
| 3 | 45 |
| 4 | 60 |
| 5+ | 80 |

Pest Management. The pesticides and rates mentioned in this cost study as well as other materials available are listed in *UC Integrated Pest Management Guidelines, Peaches* online at www.imp.ucdavis.edu. Pesticides mentioned in the study are commonly used, but may not be UC recommendations.

Weeds (Orchard Floor Management). Orchard floor management consists of two different areas (row middles and tree rows or berms) that are treated differently to combat weeds. At planting, weeds in the tree rows are controlled with a post-emergent (Gramoxone) and pre-emergent (Prowl) herbicide spray. Beginning in the first year, the middles are mowed four times (April, May, June, July). A dormant strip spray (Roundup, Matrix, and Surflan combination) is applied in the late fall, winter, or early spring. One spot spray (Gramoxone) is applied in June of the first year and two spot sprays thereafter: one of Gramoxone and one of Roundup are applied during the season (April, June) to control persistent or perennial weeds.

Insects, Mites and Diseases. Various insects and diseases occur throughout the year depending on tree growth, weather and pest development. Refer to the **Peach Year-Round IPM program** at <http://ipm.ucdavis.edu/PMG/C602/m602yi01.html>. The typical growth stages mentioned in this study are prebloom, partial bloom, bloom, petal fall, and leaf fall (dormant). During the early years, the trees require less material to effectively treat the young trees. Treatments are made using an airblast sprayer. Air applications may be necessary when wet conditions exist on the orchard floor. Asana is applied in May and July during the first year for peach twig borer (PTB) and oriental fruit moth (OFM) control. The dormant/delayed dormant spray beginning in January of the second year (based on calendar year) includes oil for European Red Mite and San Jose scale, a copper fungicide (Kocide) for peach leaf curl (PLC) and may include an insecticide (Dimilin) for PTB. An alternative spray timing for PTB is during bloom. Oriental Fruit Moth (OFM) control starts in the third season (first bearing year) with Checkmate OFM Flowable combined with the OFM and PTB sprays in May (Asana), June (Intrepid), July (Altacor) and possibly August (Asana). Agri-Mek for web spinning mite control is added to the May or June

spray. In season sprays are a combination of different pesticides that control several different pests such as web spinning mites, PTB, OFM and powdery mildew. Powdery mildew is treated at petal fall with Quintec and two or more sulfur applications are made from April to pit hardening depending on weather to control powdery mildew and possibly rust. Rust can be a problem in cool, wet springs. Shot hole control begins at leaf drop in late November mainly in the Sacramento Valley. Ziram is applied for both shothole and peach leaf curl.

Harvest. Harvest normally starts in the third establishment year. Harvest costs will vary according to yield. The crop is harvested by hand and hauled to a processor. The grower furnishes necessary tractors and bin trailers.

| Year | Tons/Acre |
|------|-----------|
| 3 | 6 |
| 4 | 12 |
| 5 | 15 |
| 6 | 18 |
| 7+ | 20 |

Yields and Returns. Although peaches begin bearing an economic crop in the third year after planting, yield maturity is not reached until the sixth or seventh year. Typical annual yields are shown in Table C.

Production Cultural Practices and Material Inputs in a Mature Orchard Tables 2-8

Pruning/Tree Wire. In this study, pruning is done with hand crews during the dormant months (November through February). Prunings are normally stacked in the middles and shredded. Additional pruning is done in the summer. Wires wrapped around the tree are repaired in the dormant months.

Fertilization. Tree nutrient status is determined by leaf analysis in July. Liquid nitrogen fertilizer at 80 pounds of N per acre is injected through the low volume irrigation system in three equal applications from April to August. Some orchards may have potassium and/or zinc deficiency. Potassium may be soil applied in the fall and zinc may be soil or foliar applied.

Thinning and Propping. Thinning is done by hand in the spring, May and/or June. In some years, some blocks will need to be re-thinned if sizing is a problem. Limbs are propped with boards in June or July (approximately one month prior to harvest) to prevent limb breakage as fruit size increases. Props are removed at harvest.

Irrigation. Water for irrigation is supplied by a water district. The price per acre or acre-foot varies by district in this region. In this study district water costs \$2.74 per acre-inch or \$32.88 per acre foot. The annual water requirements assumed is 42 acre-inches. Water costs can be significantly affected by rainfall. Pumping costs for spring frost protection may also be a consideration.

Pest Management. The pesticides and rates mentioned in this cost study are listed in *UC Integrated Pest Management Guidelines, Peaches*. For information on other pesticides available, pest identification, monitoring, and management visit the UC IPM website at www.ipm.ucdavis.edu. For information and pesticide use permits, contact the local county agricultural commissioner's office. **Pesticides mentioned in this study are used to calculate rates and costs. Although growers commonly use the pesticides mentioned, many other pesticides are available. Check with your Pest Control Adviser (PCA) and/or the UC IPM website for current recommendations.** Adjuvants are recommended for use with many pesticides for effective control, but the adjuvants and their costs are not included in this study. Pesticide costs may vary by location, brand, and grower volume. Pesticide costs in this study are taken from dealer (retail prices) and grower prices.

Weeds (Orchard Floor Management). The tree rows are sprayed with an herbicide or a mixture of herbicides and the row middles are mowed four times. In this study, Roundup in April and Gramoxone in June are applied as spot sprays in the tree rows. A dormant strip spray mixture of Roundup, Matrix and Surflan is applied to the tree row in the fall or winter (November through January).

Insects and Mites. In this study, insect and mite management begins with a dormant or delayed dormant spray for control of European red mite, San Jose scale, PLC and PTB. The dormant spray of horticultural oil, basic copper (Kocide) and insecticide (Dimilin) is made before bud swell during January or early February. The in-season treatments used in this study for OFM and PTB occur in May (Asana), June (Intrepid), July (Altacor) and for extra late harvested varieties, possibly August (Asana), also. Flowable pheromone (Checkmate OFM) is commonly added to these sprays. Some growers use pheromone mating disruption dispensers rather than sprays for OFM which are applied by early March. AgriMek is added to the May or June spray to control web spinning mites. All of the insect sprays are made with a tractor and an airblast (orchard) sprayer, except when the orchard is not accessible to ground equipment.

Diseases. Control of bloom, foliar, and fruit diseases become more critical in bearing orchards. Peach leaf curl, brown rot, powdery mildew, and rust are the main peach diseases, but other diseases may require treatment. In this study, peach leaf curl is treated with copper fungicide in the dormant spray to prevent damage later in the growing season. Two brown rot treatments are made at partial and full bloom: February with Pristine and March with Indar or Elite. Powdery mildew is treated in March (petal fall) with Quintec and for mildew and rust in April and May with wettable sulfur. Shot hole control begins at leaf drop in late November mainly in the Sacramento Valley. Ziram is applied for shothole and also controls peach leaf curl.

No costs are shown, but in some years a preharvest fungicide spray to prevent ripe fruit rot is applied during July or August if it rains prior to harvest. Fungicides are applied using either an orchard sprayer or by air when the orchard is inaccessible to ground sprays or for quicker coverage.

Harvest. Yield maturity is reached between the fifth and seventh year. In this cost study the grower contracts to have the crop hand harvested in August. Peaches are handpicked, field sorted (in Sacramento Valley, fruit is sorted from bins), placed into bins left throughout the orchard, and moved out of the orchard to the roadside where the bins are loaded on-to trucks and hauled to the processor. Some growers, primarily in the Sacramento Valley, machine harvest. See Table D for costs.

| Operation | \$/acre |
|------------------------|--------------|
| Bin Distribution | 31 |
| Harvest (Machine Pick) | 600 |
| Fruit Sorters | 58 |
| Bin Roller/Prop Man | 15 |
| Canner Dockage Fee | 600 |
| Total Harvest | 1,304 |

Yields and Returns. Cling peaches yields fluctuate over years by grower, variety and region. Nine counties produce the majority of the reported cling peaches grown in California and the United States. In this study, the average yield over the life of a mature orchard is 20 tons per acre. The contracted price for the 2010-2011 season was \$287 per ton and is used to determine potential profits/losses. Table 5 shows income, costs, and net returns at varying yields and prices.

Assessment. The Cling Peach Board (CPB) assesses all cling peaches, commercially grown in the state, to pay for cling peach promotion and research. The mandatory assessment is \$2.90 per ton.

The California Canning Peach Association is a grower organization which negotiates contract prices with processors and supports cling peach mechanized research. Membership is voluntary except for Stanislaus and Tuolumne variety plantings. The assessment rate is \$1.25 per paid ton. No cost is shown in this study.

Pickup/ATV. The grower uses the pickup for business and personal use. It is assumed that 5,000 miles are for business use. The ATV is used for inspecting and monitoring the orchard. It is also used for irrigating and checking the system, but is not included as an irrigation cost.

Labor, Interest, and Equipment

Labor. Labor rates of \$17.29 per hour for machine operators and \$10.97 for general labor includes payroll overhead of 33%. The basic hourly wages are \$13.00 for machine operators and \$8.25 for general labor. The overhead includes the employers' share of federal and California state payroll taxes, workers' compensation insurance for fruit orchards (code 0016), and a percentage for other possible benefits. Workers' compensation insurance costs will vary among growers, but for this study the cost is based upon the average industry final rate as of January 1, 2010 (California Department of Insurance). Labor for operations involving machinery are 20% higher than the operation time given in Table 2 to account for the extra labor involved in equipment set up, moving, maintenance, work breaks, and field repair.

Interest on Operating Capital. Interest on operating capital is based on cash operating costs and is calculated monthly until harvest at a nominal rate of 5.75% per year. A nominal interest rate is the typical market cost of borrowed funds. The interest cost of post harvest operations is discounted back to the last harvest month using a negative interest charge. The rate will vary depending upon various factors, but the rate in this study is considered a typical basic lending rate by a farm lending agency as of January 2011.

Equipment Operating Costs. Repair costs are based on purchase price, annual hours of use, total hours of life, and repair coefficients formulated by American Society of Agricultural Engineers (ASAE). Fuel and lubrication costs are also determined by ASAE equations based on maximum power takeoff (PTO) horsepower, and fuel type. Prices for on-farm delivery of diesel and gasoline are \$2.60 (excludes excise tax) and \$3.10 per gallon, respectively. The cost includes a 2.5% local sales tax on diesel fuel and 7.5% sales tax on gasoline. The fuel prices are the 2010 average costs derived from the Energy Information Administration monthly data. Gasoline also includes federal and state excise tax, which are refundable for on-farm use when filing your income tax. The fuel, lube, and repair cost per acre for each operation in Table 2 is determined by multiplying the total hourly operating cost in Table 7 for each piece of equipment used for the selected operation by the hours per acre. Tractor time is 10% higher than implement time for a given operation to account for setup, travel and down time.

Risk. The risks associated with producing and marketing cling peaches should not be minimized. While this study makes every effort to model a production system based on typical, real world practices, it cannot fully represent financial, agronomic and market risks which affect the profitability and economic viability of cling peach production. A market channel should be determined before cling peaches are planted and brought into production. Though, not used in this study, crop insurance is a risk management tool available to growers.

Cash Overhead Costs

Cash overhead consists of various cash expenses paid out during the year that are assigned to the whole farm and not to a particular operation. These costs include property taxes, interest on operating capital, office expense, liability and property insurance, sanitation services, equipment repairs, and management.

Property Taxes. Counties charge a base property tax rate of 1% on the assessed value of the property. In some counties special assessment districts exist and charge additional taxes on property including equipment, buildings, and improvements. For this study, county taxes are calculated as 1% of the average value of the property. Average value equals new cost plus salvage value divided by 2 on a per acre basis.

Insurance. Insurance for farm investments varies depending on the assets included and the amount of coverage. Property insurance provides coverage for property loss and is charged at 0.767% of the average value of the assets over their useful life. Liability insurance covers accidents on the farm and costs \$581 for the entire farm.

Office Expense. Office and business expenses are estimated at \$75 per acre. These expenses include office supplies, telephones, bookkeeping, accounting, legal fees, shop and office utilities, regulatory fees, worker and food safety, and miscellaneous administrative charges.

Sanitation Services. Sanitation services provide portable toilets for the orchard and cost the farm \$512 annually. The cost includes a double toilet, delivery and 2 months of weekly service.

Investment Repairs. Annual maintenance is calculated as 2% of the purchase price.

Non-Cash Overhead Costs

Non-Cash Overhead is calculated as the capital recovery cost for equipment and other farm investments.

Capital Recovery Costs. Capital recovery cost is the annual depreciation and interest costs for a capital investment. It is the amount of money required each year to recover the difference between the purchase price and salvage value (unrecovered capital). It is equivalent to the annual payment on a loan for the investment with the down payment equal to the discounted salvage value. This is a more complex method of calculating ownership costs than straight-line depreciation and opportunity costs, but more accurately represents the annual costs of ownership because it takes the time value of money into account (Boehlje and Eidman). The formula for the calculation of the annual capital recovery costs is $((\text{Purchase Price} - \text{Salvage Value}) \times \text{Capital Recovery Factor}) + (\text{Salvage Value} \times \text{Interest Rate})$.

Salvage Value. Salvage value is an estimate of the remaining value of an investment at the end of its useful life. For farm machinery (tractors and implements) the remaining value is a percentage of the new cost of the investment (Boehlje and Eidman). The percent remaining value is calculated from equations developed by the American Society of Agricultural Engineers (ASAE) based on equipment type and years of life. The life in years is estimated by dividing the wear out life, as given by ASAE, by the annual hours of use in this operation. For other investments including irrigation systems, buildings, and miscellaneous equipment, the value at the end of its useful life is zero. The salvage value for land is the purchase price because land does not depreciate.

Capital Recovery Factor. Capital recovery factor is the amortization factor or annual payment whose present value at compound interest is 1. The amortization factor is a table value that corresponds to the interest rate used and the life of the machine.

Interest Rate. The interest rate of 4.75% for investments is used to calculate capital recovery. The rate will vary depending upon size of loan and other lending agency conditions, but is a suggested rate by a farm lending agency in January 2011.

Land. Cling peach orchards in Stanislaus County range in value from \$12,000 to \$25,000 and \$6,000 to \$25,000 in the Yuba/Sutter Counties. Bare land over several northern peach producing counties ranges from \$4,000 to \$22,000. Because the orchard is established on land previously planted to tree crops, the bare land in this study is valued at \$11,000 per acre.

Irrigation System. The orchard is irrigated using a micro sprinkler system. Water is delivered to the orchard from the district ditch and distributed through to the orchard by way of underground mainlines and valves. The life of the irrigation system is estimated at 18 years. The irrigation system is installed before the orchard is planted. The irrigation system is considered an improvement to the property and is shown in the capital recovery sections of Tables 1-3 and Investments in Table 6.

Establishment Cost. The establishment cost is the sum of cash costs for land preparation, planting, trees, production expenses, and cash overhead for growing cling peach trees through the first year fruit is harvested minus any returns from production. The *Total Accumulated Net Cash Cost* in the third year shown in Table 1 represents the establishment cost per acre. For this study, the cost is \$6,286 per acre or \$251,429 for the 40 acres planted to processing peaches. Establishment cost is amortized over the remaining 15 years that the orchard is assumed to be in production. Establishment cost is used to determine the annual capital recovery expense and interest on investment for production years.

Buildings. The shop building is a 1,800 square foot metal building and/or open structures on a cement slab.

Shop Tools, Pruning Equipment, and Ladders. This includes an assortment of shop tools, various pruning equipment, and 12 foot orchard ladders. The ladders are used for pruning and harvesting.

Fuel Tanks. Two 250-gallon fuel tanks using gravity feed are on metal stands. The tanks are setup in a cement containment pad that meets federal, state, and county regulations.

Equipment. Farm equipment is purchased new or used, but the study shows the current purchase price for new equipment. The new purchase price is adjusted to 60% to indicate a mix of new and used equipment. Annual ownership costs for equipment and other investments are shown in the Whole Farm Annual Equipment, Investment, and Business Overhead Costs table. Equipment costs are composed of three parts: non-cash overhead, cash overhead, and operating costs. Both of the overhead factors have been discussed in previous sections. The operating costs consist of repairs, fuel, and lubrication and are discussed under operating costs.

Table Values. Due to rounding, the totals may be slightly different from the sum of the components.

Acknowledgment. Appreciation is expressed to those growers and other cooperators who provided information for this study.

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Table 1. COSTS PER ACRE TO ESTABLISH A PEACH ORCHARD
 SACRAMENTO VALLEY AND SAN JOAQUIN VALLEY - 2011

| | Cost Per Acre | | | | |
|---------------------------------------------------------------------|---------------|------------|--------------|--------------|-----|
| | Year: | 1st | 2nd | 3rd | 4th |
| Yield: Tons Per Acre | | | | 6 | 12 |
| Planting Costs: | | | | | |
| Orchard Remove: Trees (custom) | 350 | | | | |
| Orchard Remove: Field Cleanup (custom) | 185 | | | | |
| Land Prep: Rip 2X (custom) | 300 | | | | |
| Land Prep: Laser Level (custom) | 140 | | | | |
| Land Prep: Backhoe (custom) | 604 | | | | |
| Land Prep: Fumigate (custom) | 850 | | | | |
| Land Prep: Springtooth 1X (custom) | 20 | | | | |
| Land Prep: Layout & Ridge (custom) | 75 | | | | |
| Trees: 151 per acre | 763 | | | | |
| Land Prep: Survey and Mark Orchard (custom) | 38 | | | | |
| Plant, Paint, Wrap Trees (labor & materials) | 144 | | | | |
| Weed: Spray Berms (Gramoxone, Prowl) | 26 | | | | |
| TOTAL PLANTING COSTS | 3,494 | | | | |
| Cultural Costs: | | | | | |
| Prune:: Prune, Train, Sucker | 9 | 18 | 151 | 176 | |
| Fertilizer: 3X (Yr 1, 15-15-15. Yr 2, CAN17 & UN32. Y3+, UN32) | 68 | 21 | 23 | 31 | |
| Weed: Mow Middles 4X | 57 | 60 | 60 | 60 | |
| Irrigate (water & labor) | 61 | 77 | 94 | 110 | |
| Weed: Spot Spray (Yr 1, Gramoxone, Yr 2+, Roundup 1X, Gramoxone 1X) | 12 | 27 | 27 | 27 | |
| Insect: OFM, PTB (Asana) | 163 | | | | |
| Weed: Dormant Strip (Roundup, Matrix, Surflan) | 67 | 67 | 67 | 67 | |
| Disease: Shothole, PLC (Ziram) | 28 | 40 | 50 | 61 | |
| Disease/Insect: Dormant Spray (Oil, Kocide, Dimilin) | | 66 | 126 | 126 | |
| Prune: Shred Prunings | | 15 | 15 | 15 | |
| Disease: Brown Rot @ Partial Bloom (Pristine) | | 45 | 56 | 64 | |
| Disease: Mildew (Quintec) | | 55 | 55 | 55 | |
| Disease: Brown Rot @ Full Bloom (Indar) | | | 35 | 40 | |
| Rope/Wire Trees | | | 65 | 69 | |
| Disease: Mildew, Rust (Sulfur) 2X | | | 44 | 44 | |
| Insect: PTB, OFM (Asana, Checkmate) | | | 236 | 236 | |
| Thin Fruit: Hand | | | 252 | 318 | |
| Insect: PTB, OFM, Mites (Intrepid, Checkmate, AgriMek) | | | 112 | 112 | |
| Prune: Hand (summer prune) | | | 33 | 33 | |
| Fertilizer: Leaf Nutrient Analysis | | | 2 | 2 | |
| Insect: PTB, OFM (Altacor, Checkmate) | | | 104 | 104 | |
| Pickup (Business Use) | 83 | 86 | 86 | 86 | |
| ATV | 67 | 68 | 68 | 68 | |
| TOTAL CULTURAL COSTS | 613 | 643 | 1,761 | 1,903 | |
| Harvest Costs: | | | | | |
| Pick Fruit & Field Sort | | | 360 | 720 | |
| Haul to Processor | | | 36 | 72 | |
| Bin Distribution in Field | | | 3 | 33 | |
| TOTAL HARVEST COSTS | | | 399 | 825 | |
| Assessment Costs: | | | | | |
| Cling Peach Board | | | 17 | 35 | |
| TOTAL ASSESSMENT COSTS | | | 17 | 35 | |
| Interest On Operating Capital @ 5.75% | 208 | 22 | 32 | 36 | |
| TOTAL OPERATING COSTS/ACRE | 4,315 | 665 | 2,209 | 2,799 | |

UC COOPERATIVE EXTENSION
Table 1. CONTINUED
 SACRAMENTO VALLEY AND SAN JOAQUIN VALLEY - 2011

| | Cost Per Acre | | | | |
|------------------------------------------|---------------|--------------|--------------|--------------|--------------|
| | Year: | 1st | 2nd | 3rd | 4th |
| Yield: Tons Per Acre | | | | 6 | 12 |
| Cash Overhead Costs: | | | | | |
| Office Expense | 75 | 75 | 75 | 75 | 75 |
| Liability Insurance | 6 | 6 | 6 | 6 | 6 |
| Sanitation Fees (toilets) | 5 | 5 | 5 | 5 | 5 |
| Property Taxes | 130 | 131 | 132 | 133 | 133 |
| Property Insurance | 11 | 11 | 13 | 13 | 13 |
| Investment Repairs | 44 | 44 | 44 | 44 | 44 |
| TOTAL CASH OVERHEAD COSTS | 271 | 272 | 275 | 276 | 276 |
| TOTAL CASH COSTS/ACRE | 4,586 | 937 | 2,484 | 3,074 | 3,074 |
| INCOME/ACRE FROM PRODUCTION | | | 1,722 | 3,444 | 3,444 |
| NET CASH COSTS/ACRE FOR THE YEAR | 4,586 | 937 | 762 | | |
| PROFIT/ACRE ABOVE CASH COSTS | | | | | 370 |
| ACCUMULATED NET CASH COSTS/ACRE | 4,586 | 5,524 | 6,286 | 5,916 | 5,916 |
| Capital Recovery Cost: | | | | | |
| Buildings | 39 | 39 | 39 | 39 | 39 |
| Fuel Tanks | 3 | 3 | 3 | 3 | 3 |
| Shop & Field Tools | 16 | 16 | 16 | 16 | 16 |
| Low Volume Irrigation System | 117 | 117 | 117 | 117 | 117 |
| Land | 550 | 550 | 550 | 550 | 550 |
| Equipment | 59 | 66 | 98 | 101 | 101 |
| TOTAL NON-CASH OVERHEAD COST/ACRE | 784 | 792 | 824 | 827 | 827 |
| TOTAL COST/ACRE FOR THE YEAR | 5,371 | 1,729 | 3,308 | 3,901 | 3,901 |
| INCOME/ACRE FROM PRODUCTION | | | 1,722 | 3,444 | 3,444 |
| TOTAL NET COST/ACRE FOR THE YEAR | 5,371 | 1,729 | 1,586 | 457 | 457 |
| NET PROFIT/ACRE ABOVE TOTAL COST | | | | | |
| TOTAL ACCUMULATED NET COST/ACRE | 5,371 | 7,100 | 8,686 | 9,143 | 9,143 |

UC COOPERATIVE EXTENSION
Table 2. COSTS PER ACRE TO PRODUCE CLING PEACHES
 SACRAMENTO VALLEY and SAN JOAQUIN VALLEY 2011

| Operation | Operation Time (Hrs/A) | Cash and Labor Costs per Acre | | | | | Total Cost | Your Cost |
|-------------------------------------------------------|------------------------------|-------------------------------|-------------------------|---------------------------------|-----------------|--------------|---------------|--------------|
| | | Labor Cost | Fuel, Lube & Repairs | Material Cost | Custom/ Rent | | | |
| Cultural: | | | | | | | | |
| Prune: Hand Prune | 34.50 | 378 | 0 | 0 | 0 | 378 | | |
| Tree: Wire Repair | 1.50 | 16 | 0 | 25 | 0 | 41 | | |
| Disease/Insect: Dormant Spray (Oil, Kocide, Dimilin) | 0.50 | 10 | 8 | 107 | 0 | 126 | | |
| Prune: Shred Prunings | 0.40 | 8 | 7 | 0 | 0 | 15 | | |
| Disease: Brown Rot @ Partial Bloom (Pristine) | 0.50 | 10 | 8 | 45 | 0 | 64 | | |
| Disease: Brown Rot @ Full Bloom (Indar) | 0.50 | 10 | 8 | 21 | 0 | 40 | | |
| Disease: Mildew (Quintec) | 0.50 | 10 | 8 | 36 | 0 | 55 | | |
| Irrigate: (water & labor) | 2.56 | 28 | 0 | 115 | 0 | 143 | | |
| Weed: Spot Spray 2X (Roundup, 1X. Gramoxone 1X) | 0.66 | 14 | 9 | 4 | 0 | 27 | | |
| Weed: Mow Middles 4X | 1.60 | 33 | 27 | 0 | 0 | 60 | | |
| Fertilize: N (split application) (UN32) | 0.00 | 0 | 0 | 42 | 0 | 42 | | |
| Disease: Mildew, Rust (Sulfur) 2X | 1.00 | 21 | 16 | 7 | 0 | 44 | | |
| Insect: PTB, OFM (Asana, Checkmate) 2X | 1.00 | 21 | 16 | 199 | 0 | 236 | | |
| Prune: Summer Prune | 12.00 | 132 | 0 | 0 | 0 | 132 | | |
| Thin: Thin Fruit by hand | 52.00 | 570 | 0 | 0 | 0 | 570 | | |
| Insect: PTB, OFM, Mite (Intrepid, Checkmate, AgriMek) | 0.50 | 10 | 8 | 94 | 0 | 112 | | |
| Insect: PTB, OFM (Altacor, Checkmate) | 0.50 | 10 | 8 | 85 | 0 | 104 | | |
| Prop Limbs & Remove Props | 0.50 | 43 | 5 | 0 | 0 | 49 | | |
| Fertilize: Leaf Samples (nutrition analysis) | 0.00 | 0 | 0 | 0 | 2 | 2 | | |
| Disease: Shothole, PLC (Ziram) | 0.50 | 10 | 8 | 42 | 0 | 61 | | |
| Weed: Dormant Strip (Roundup, Matrix, Surflan) | 0.33 | 7 | 5 | 56 | 0 | 67 | | |
| Pickup: Farm Use | 2.85 | 59 | 27 | 0 | 0 | 86 | | |
| ATV: Irrigation & General Field Use | 2.85 | 59 | 8 | 0 | 0 | 68 | | |
| TOTAL CULTURAL COSTS | 117.25 | 1,463 | 178 | 879 | 2 | 2,521 | | |
| Harvest: | | | | | | | | |
| Bins: Field Distribution | 1.00 | 21 | 12 | 0 | 0 | 33 | | |
| Hand Pick & Field Sort | 0.00 | 0 | 0 | 0 | 1,200 | 1,200 | | |
| Haul Fruit | 0.00 | 0 | 0 | 0 | 240 | 240 | | |
| Assessment: | 0.00 | 0 | 0 | 58 | 0 | 58 | | |
| TOTAL HARVEST COSTS | 1.00 | 21 | 12 | 58 | 1,440 | 1,531 | | |
| Interest on operating capital @ 5.75% | | | | | | 53 | | |
| TOTAL OPERATING COSTS/ACRE | | 1,484 | 190 | 937 | 1,442 | 4,105 | | |
| CASH OVERHEAD: | | | | | | | | |
| Office Expense | | | | | | 75 | | |
| Liability Insurance | | | | | | 6 | | |
| Sanitation Fees | | | | | | 5 | | |
| Property Taxes | | | | | | 164 | | |
| Property Insurance | | | | | | 13 | | |
| Investment Repairs | | | | | | 75 | | |
| TOTAL CASH OVERHEAD COSTS | | | | | | 338 | | |
| TOTAL CASH COSTS/ACRE | | | | | | 4,444 | | |
| NON-CASH OVERHEAD: | | | | | | | | |
| | | Per producing Acre | | Annual Cost Capital Recovery | | | | |
| Buildings | | 568 | | 39 | | 39 | | |
| Low Volume Irrigation | | 1,400 | | 117 | | 117 | | |
| Fuel Tanks | | 44 | | 3 | | 3 | | |
| Land | | 11,579 | | 550 | | 550 | | |
| Pruning/Shop Tools | | 165 | | 16 | | 16 | | |
| Orchard Establishment | | 6,286 | | 595 | | 595 | | |
| Equipment | | 944 | | 101 | | 101 | | |
| TOTAL NON-CASH OVERHEAD COSTS | | 20,986 | | 1,422 | | 1,422 | | |
| TOTAL COSTS/ACRE | | | | | | 5,866 | | |

UC COOPERATIVE EXTENSION
Table 3. COSTS AND RETURNS PER ACRE TO PRODUCE CLING PEACHES
 SACRAMENTO VALLEY and SAN JOAQUIN VALLEY 2011

| | Quantity/ Acre | Unit | Price or Cost/Unit | Value or Cost/Acre | Your Cost |
|------------------------------------------|-------------------|------|-----------------------|-----------------------|--------------|
| GROSS RETURNS | | | | | |
| Processing Peaches (Cling & Freestone) | 20.00 | ton | 287.00 | 5,740 | |
| TOTAL GROSS RETURNS FOR PEACHES | | | | 5,740 | |
| OPERATING COSTS | | | | | |
| Insecticide: | | | | | |
| Superior Oil (Dormant Oil) | 5.00 | gal | 7.90 | 40 | |
| Dimilin 2L | 14.00 | floz | 1.92 | 27 | |
| Pristine | 12.00 | oz | 3.76 | 45 | |
| Asana XL | 19.20 | floz | 8.00 | 154 | |
| Checkmate OFM (F) | 5.20 | floz | 17.38 | 90 | |
| Intrepid 2F | 12.80 | floz | 2.10 | 27 | |
| Agri-Mek 0.15EC (miticide) | 12.80 | floz | 3.45 | 44 | |
| Altacor | 4.00 | oz | 15.72 | 63 | |
| Fungicide: | | | | | |
| Kocide 20/20 | 10.00 | lb | 4.10 | 41 | |
| Ziram 76DF | 8.00 | lb | 5.26 | 42 | |
| Indar 75WSP | 2.00 | oz | 10.70 | 21 | |
| Quintec | 7.00 | floz | 5.16 | 36 | |
| Sulfur (wetable) | 20.00 | lb | 0.37 | 7 | |
| Tree Aids: | | | | | |
| Tree Wire (Repair Materials) | 1.00 | acre | 25.00 | 25 | |
| Irrigation: | | | | | |
| Water | 42.00 | acin | 2.74 | 115 | |
| Herbicide: | | | | | |
| Roundup (or generic glyphosate) | 1.30 | pint | 6.24 | 8 | |
| Gramoxone Inteon | 0.30 | pint | 6.15 | 2 | |
| Matrix SG | 1.32 | oz | 22.69 | 30 | |
| Surflan 4AS | 1.50 | pint | 13.07 | 20 | |
| Fertilizer: | | | | | |
| UN-32 | 80.00 | lb N | 0.52 | 42 | |
| Custom/Contract: | | | | | |
| Leaf Nutrition Analysis | 1.00 | acre | 2.00 | 2 | |
| Harvest - Hand Pick & Field Sort | 20.00 | ton | 60.00 | 1,200 | |
| Haul Fruit | 20.00 | ton | 12.00 | 240 | |
| Assessment: | | | | | |
| Cling Peach Board | 20.00 | ton | 2.90 | 58 | |
| Labor (machine) | 18.83 | hr | 17.29 | 326 | |
| Labor (non-machine) | 105.56 | hr | 10.97 | 1,158 | |
| Fuel - Gas | 7.60 | gal | 3.10 | 24 | |
| Fuel - Diesel | 35.03 | gal | 2.60 | 91 | |
| Lube | | | | 17 | |
| Machinery repair | | | | 58 | |
| Interest on operating capital @ 5.75% | | | | 53 | |
| TOTAL OPERATING COSTS/ACRE | | | | 4,105 | |
| NET RETURNS ABOVE OPERATING COSTS | | | | 1,635 | |
| CASH OVERHEAD COSTS: | | | | | |
| Office Expense | | | | 75 | |
| Liability Insurance | | | | 6 | |
| Sanitation Fees | | | | 5 | |
| Property Taxes | | | | 164 | |
| Property Insurance | | | | 13 | |
| Investment Repairs | | | | 75 | |
| TOTAL CASH OVERHEAD COSTS/ACRE | | | | 338 | |
| TOTAL CASH COSTS/ACRE | | | | 4,444 | |

UC COOPERATIVE EXTENSION
Table 3. CONTINUED
 SACRAMENTO VALLEY and SAN JOAQUIN VALLEY 2011

| | Quantity/ Acre | Unit | Price or Cost/Unit | Value or Cost/Acre | Your Cost |
|---------------------------------------------|-------------------|------|-----------------------|-----------------------|--------------|
| NON-CASH OVERHEAD COSTS (Capital Recovery): | | | | | |
| Buildings | | | | 39 | |
| Low Volume Irrigation | | | | 117 | |
| Fuel Tanks | | | | 3 | |
| Land | | | | 550 | |
| Pruning/Shop Tools | | | | 16 | |
| Orchard Establishment | | | | 595 | |
| Equipment | | | | 101 | |
| TOTAL NON-CASH OVERHEAD COSTS/ACRE | | | | 1,422 | |
| TOTAL COSTS/ACRE | | | | 5,866 | |
| NET RETURNS ABOVE TOTAL COSTS | | | | -126 | |

UC COOPERATIVE EXTENSION

Table 4. MONTHLY CASH COSTS PER ACRE TO PRODUCE CLING PEACHES
SACRAMENTO VALLEY and SAN JOAQUIN VALLEY 2011

| | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | TOTAL |
|-------------------------------------------------------|------------|------------|------------|------------|------------|------------|------------|--------------|-----------|-----------|------------|-----|--------------|
| Beginning JAN 11 | | | | | | | | | | | | | |
| Ending DEC 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | |
| Cultural: | | | | | | | | | | | | | |
| Prune: Trees | 189 | 189 | | | | | | | | | | | 378 |
| Tree: Wire Repair | 41 | | | | | | | | | | | | 41 |
| Disease/Insect: Dormant Spray (Oil, Kocide, Dimilin) | | 126 | | | | | | | | | | | 126 |
| Prune: Shred Prunings | | | 15 | | | | | | | | | | 15 |
| Disease: Brown Rot @ Partial Bloom (Pristine) | | 64 | | | | | | | | | | | 64 |
| Disease: Brown Rot @ Full Bloom (Indar) | | | 40 | | | | | | | | | | 40 |
| Disease: Mildew (Quintec) | | | 55 | | | | | | | | | | 55 |
| Irrigate: (water & labor) | | | | 18 | 36 | 36 | 36 | 18 | | | | | 143 |
| Weed: Spot Spray 2X (Roundup, 1X. Gramoxone 1X) | | | | 13 | | 13 | | | | | | | 27 |
| Weed: Mow Middles 4X | | | | 15 | 15 | 15 | 15 | | | | | | 60 |
| Fertilize: N (split application) (UN32) | | | | 14 | | 14 | | 14 | | | | | 42 |
| Disease: Mildew (Sulfur) 2X | | | | 22 | 22 | | | | | | | | 44 |
| Insect: PTB, OFM (Asana, Checkmate) 2X | | | | | 118 | | | 118 | | | | | 236 |
| Prune: Summer Prune | | | | | | 132 | | | | | | | 132 |
| Thin: Thin Fruit by hand | | | | | | 570 | | | | | | | 570 |
| Insect: PTB, OFM, Mite (Intrepid, Checkmate, AgriMek) | | | | | | 112 | | | | | | | 112 |
| Insect: PTB, OFM (Altacor, Checkmate) | | | | | | | 104 | | | | | | 104 |
| Prop Limbs & Remove Props | | | | | | | 30 | 19 | | | | | 49 |
| Fertilize: Leaf Samples (nutrition analysis) | | | | | | | 2 | | | | | | 2 |
| Disease: Shothole, PLC (Ziram) | | | | | | | | | | | 61 | | 61 |
| Weed: Dormant Strip (Roundup, Matrix, Surflan) | | | | | | | | | | | 67 | | 67 |
| Pickup: Farm Use | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 86 |
| ATV: Irrigation & General Field Use | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 68 |
| TOTAL CULTURAL COSTS | 245 | 393 | 124 | 96 | 205 | 906 | 201 | 182 | 14 | 14 | 142 | | 2,521 |
| Harvest: | | | | | | | | | | | | | |
| Bins: Field Distribution | | | | | | | | 33 | | | | | 33 |
| Hand Pick & Field Sort | | | | | | | | 1,200 | | | | | 1,200 |
| Haul Fruit | | | | | | | | 240 | | | | | 240 |
| Assessment | | | | | | | | 58 | | | | | 58 |
| TOTAL HARVEST COSTS | | | | | | | | 1,531 | | | | | 1,531 |
| Interest on operating capital @ 5.75% | 1 | 3 | 4 | 4 | 5 | 9 | 10 | 19 | -1 | -1 | -1 | | 53 |
| TOTAL OPERATING COSTS/ACRE | 246 | 396 | 127 | 101 | 210 | 916 | 211 | 1,732 | 13 | 13 | 141 | | 4,105 |

UC COOPERATIVE EXTENSION
Table 4. CONTINUED
 SACRAMENTO VALLEY and SAN JOAQUIN VALLEY 2011

| Beginning JAN 11 | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | TOTAL |
|----------------------------------|------------|------------|------------|------------|------------|------------|------------|--------------|------------|-----------|------------|----------|--------------|
| Ending DEC 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | |
| CASH OVERHEAD: | | | | | | | | | | | | | |
| Office Expense | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | | 75 |
| Liability Insurance | | 6 | | | | | | | | | | | 6 |
| Sanitation Fees | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | | 5 |
| Property Taxes | | | 82 | | | | | | 82 | | | | 164 |
| Property Insurance | | | 3 | | | 3 | | | 3 | | | 3 | 13 |
| Investment Repairs | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 75 |
| TOTAL CASH OVERHEAD COSTS | 14 | 20 | 99 | 14 | 14 | 17 | 14 | 14 | 99 | 14 | 13 | 9 | 341 |
| TOTAL CASH COSTS/ACRE | 259 | 415 | 226 | 114 | 224 | 932 | 225 | 1,746 | 112 | 27 | 154 | 9 | 4,444 |

UC COOPERATIVE EXTENSION
Table 5. RANGING ANALYSIS
 SACRAMENTO VALLEY and SAN JOAQUIN VALLEY 2011

COSTS PER ACRE AT VARYING YIELDS TO PRODUCE CLING PEACHES

| | YIELD (tons/acre) | | | | | | |
|---------------------------------------|-------------------|--------------|--------------|--------------|--------------|--------------|--------------|
| | 14 | 16 | 18 | 20 | 22 | 24 | 26 |
| OPERATING COSTS: | | | | | | | |
| Cultural Cost | 2,521 | 2,521 | 2,521 | 2,521 | 2,521 | 2,521 | 2,521 |
| Harvest: Pick, Field Sort & Haul | 1,031 | 1,178 | 1,326 | 1,473 | 1,620 | 1,767 | 1,915 |
| Assessment | 41 | 46 | 52 | 58 | 64 | 70 | 75 |
| Interest on operating capital @ 5.75% | 51 | 52 | 53 | 53 | 54 | 55 | 55 |
| TOTAL OPERATING COSTS/ACRE | 3,644 | 3,797 | 3,952 | 4,105 | 4,259 | 4,413 | 4,566 |
| Total Operating Costs/ton | 260 | 237 | 220 | 205 | 194 | 184 | 176 |
| CASH OVERHEAD COSTS/ACRE | | | | | | | |
| TOTAL CASH COSTS/ACRE | 3,982 | 4,135 | 4,290 | 4,443 | 4,597 | 4,751 | 4,904 |
| Total Cash Costs/ton | 284 | 258 | 238 | 222 | 209 | 198 | 189 |
| NON-CASH OVERHEAD COSTS/ACRE | | | | | | | |
| TOTAL COSTS/ACRE | 5,403 | 5,557 | 5,712 | 5,865 | 6,019 | 6,174 | 6,327 |
| Total Costs/ton | 386 | 347 | 317 | 293 | 274 | 257 | 243 |

NET RETURNS PER ACRE ABOVE OPERATING COSTS

| PRICE \$/ton | YIELD (tons/acre) | | | | | | |
|-----------------|-------------------|-------|-------|-------|-------|-------|-------|
| | 14 | 16 | 18 | 20 | 22 | 24 | 26 |
| 227.00 | -466 | -165 | 134 | 435 | 735 | 1,035 | 1,336 |
| 247.00 | -186 | 155 | 494 | 835 | 1,175 | 1,515 | 1,856 |
| 267.00 | 94 | 475 | 854 | 1,235 | 1,615 | 1,995 | 2,376 |
| 287.00 | 374 | 795 | 1,214 | 1,635 | 2,055 | 2,475 | 2,896 |
| 307.00 | 654 | 1,115 | 1,574 | 2,035 | 2,495 | 2,955 | 3,416 |
| 327.00 | 934 | 1,435 | 1,934 | 2,435 | 2,935 | 3,435 | 3,936 |
| 347.00 | 1,214 | 1,755 | 2,294 | 2,835 | 3,375 | 3,915 | 4,456 |

NET RETURNS PER ACRE ABOVE CASH COSTS

| PRICE \$/ton | YIELD (tons/acre) | | | | | | |
|-----------------|-------------------|-------|-------|-------|-------|-------|-------|
| | 14 | 16 | 18 | 20 | 22 | 24 | 26 |
| 227.00 | -804 | -503 | -204 | 97 | 397 | 697 | 998 |
| 247.00 | -524 | -183 | 156 | 497 | 837 | 1,177 | 1,518 |
| 267.00 | -244 | 137 | 516 | 897 | 1,277 | 1,657 | 2,038 |
| 287.00 | 36 | 457 | 876 | 1,297 | 1,717 | 2,137 | 2,558 |
| 307.00 | 316 | 777 | 1,236 | 1,697 | 2,157 | 2,617 | 3,078 |
| 327.00 | 596 | 1,097 | 1,596 | 2,097 | 2,597 | 3,097 | 3,598 |
| 347.00 | 876 | 1,417 | 1,956 | 2,497 | 3,037 | 3,577 | 4,118 |

NET RETURNS PER ACRE ABOVE TOTAL COSTS

| PRICE \$/ton | YIELD (tons/acre) | | | | | | |
|-----------------|-------------------|--------|--------|--------|--------|-------|-------|
| | 14 | 16 | 18 | 20 | 22 | 24 | 26 |
| 227.00 | -2,225 | -1,925 | -1,626 | -1,325 | -1,025 | -726 | -425 |
| 247.00 | -1,945 | -1,605 | -1,266 | -925 | -585 | -246 | 95 |
| 267.00 | -1,665 | -1,285 | -906 | -525 | -145 | 234 | 615 |
| 287.00 | -1,385 | -965 | -546 | -125 | 295 | 714 | 1,135 |
| 307.00 | -1,105 | -645 | -186 | 275 | 735 | 1,194 | 1,655 |
| 327.00 | -825 | -325 | 174 | 675 | 1,175 | 1,674 | 2,175 |
| 347.00 | -545 | -5 | 534 | 1,075 | 1,615 | 2,154 | 2,695 |

UC COOPERATIVE EXTENSION

Table 6. WHOLE FARM ANNUAL EQUIPMENT, INVESTMENT, AND BUSINESS OVERHEAD COSTS
SACRAMENTO VALLEY and SAN JOAQUIN VALLEY 2011

ANNUAL EQUIPMENT COSTS

| Yr | Description | Price | Yrs Life | Salvage Value | Capital Recovery | Cash Overhead | | | Total |
|--------------------------|------------------------|----------------|-------------|------------------|---------------------|----------------|------------|--|---------------|
| | | | | | | Insur- ance | Taxes | | |
| 11 | 55HP 2WD Tractor | 33,039 | 15 | 6,432 | 2,826 | 151 | 197 | | 3,175 |
| 11 | 66HP 2WD Tractor | 39,424 | 15 | 7,675 | 3,372 | 181 | 235 | | 3,788 |
| 11 | All Terrain Vehicle | 7,579 | 7 | 2,875 | 942 | 40 | 52 | | 1,035 |
| 11 | Bin Trailers #1 | 1,970 | 15 | 189 | 178 | 8 | 11 | | 197 |
| 11 | Bin Trailers #2 | 1,970 | 15 | 189 | 178 | 8 | 11 | | 197 |
| 11 | Bin Trailers #3 | 1,970 | 15 | 189 | 178 | 8 | 11 | | 197 |
| 11 | Bin Trailers #4 | 1,970 | 15 | 189 | 178 | 8 | 11 | | 197 |
| 11 | Mower - Flail 10 ft | 10,477 | 10 | 1,853 | 1,191 | 47 | 62 | | 1,300 |
| 11 | Orch.Sprayer 500 G | 21,200 | 10 | 3,749 | 2,411 | 96 | 125 | | 2,631 |
| 11 | Pickup Truck - 3/4 ton | 32,000 | 7 | 12,139 | 3,978 | 169 | 221 | | 4,368 |
| 11 | Utility Trailer | 1,836 | 20 | 96 | 141 | 7 | 10 | | 158 |
| 11 | Weed Sprayer 100 Gal | 4,500 | 10 | 796 | 512 | 20 | 26 | | 558 |
| TOTAL | | 157,935 | | 36,371 | 16,083 | 745 | 971 | | 17,800 |
| 60% of New Cost * | | 94,761 | | 21,823 | 9,650 | 447 | 583 | | 10,680 |

*Used to reflect a mix of new and used equipment

ANNUAL INVESTMENT COSTS

| Description | Purchase Price | Yrs Life | Salvage Value | Capital Recovery | Cash Overhead | | | Total |
|-------------------------|-------------------|-------------|------------------|---------------------|---------------|---------------|--------------|----------------|
| | | | | | Insurance | Taxes | Repairs | |
| INVESTMENT | | | | | | | | |
| Buildings 1,800 sqft | 54,000 | 25 | | 3,736 | 207 | 270 | 1,080 | 5,293 |
| Establishment (Orchard) | 251,429 | 15 | | 23,816 | 0 | 1,257 | 1,257 | 26,330 |
| Fuel Tanks 2-250 gal | 4,200 | 40 | 420 | 317 | 18 | 23 | 84 | 442 |
| Land | 1,100,000 | 15 | 1,100,000 | 52,250 | 0 | 11,000 | 0 | 63,250 |
| Low Volume Irrigation | 56,000 | 18 | | 4,697 | 215 | 280 | 1,120 | 6,312 |
| Pruning/Field Tools | 2,500 | 10 | | 320 | 10 | 13 | 50 | 392 |
| Shop Tools | 13,136 | 15 | 1,314 | 1,182 | 55 | 72 | 263 | 1,573 |
| TOTAL INVESTMENT | 1,481,265 | | 1,101,734 | 86,318 | 505 | 12,915 | 3,854 | 103,592 |

ANNUAL BUSINESS OVERHEAD COSTS

| Description | Units/ Farm | Unit | Price/ Unit | Total Cost |
|---------------------|----------------|------|----------------|---------------|
| Liability Insurance | 95 | acre | 6.12 | 581 |
| Office Expense | 95 | acre | 75.00 | 7,125 |
| Sanitation Fees | 40 | acre | 12.80 | 512 |

UC COOPERATIVE EXTENSION
Table 7. HOURLY EQUIPMENT COSTS
 SACRAMENTO VALLEY and SAN JOAQUIN VALLEY 2011

| Yr | Description | COSTS PER HOUR | | | | | | | | |
|----|------------------------|-------------------------|---------------------|----------------|-------|---------|----------------|-------|----------------|--------------------|
| | | Actual Hours Used | Capital Recovery | Cash Overhead | | | Operating | | Total Oper. | Total Costs/Hr. |
| | | | | Insur- ance | Taxes | Repairs | Fuel & Lube | | | |
| 11 | 55HP 2WD Tractor | 800 | 2.12 | 0.11 | 0.15 | 1.48 | 8.08 | 9.56 | 11.94 | |
| 11 | 66HP 2WD Tractor | 800 | 2.53 | 0.14 | 0.18 | 1.76 | 9.69 | 11.45 | 14.30 | |
| 11 | All Terrain Vehicle | 285 | 1.98 | 0.08 | 0.11 | 0.56 | 2.38 | 2.94 | 5.11 | |
| 11 | Bin Trailers #1 | 166 | 0.64 | 0.03 | 0.04 | 0.28 | 0.00 | 0.28 | 0.99 | |
| 11 | Bin Trailers #2 | 166 | 0.64 | 0.03 | 0.04 | 0.28 | 0.00 | 0.28 | 0.99 | |
| 11 | Bin Trailers #3 | 166 | 0.64 | 0.03 | 0.04 | 0.28 | 0.00 | 0.28 | 0.99 | |
| 11 | Bin Trailers #4 | 166 | 0.64 | 0.03 | 0.04 | 0.28 | 0.00 | 0.28 | 0.99 | |
| 11 | Mower - Flail 10 ft | 200 | 3.57 | 0.14 | 0.18 | 4.42 | 0.00 | 4.42 | 8.31 | |
| 11 | Orch.Sprayer 500 G | 230 | 6.29 | 0.25 | 0.33 | 3.65 | 0.00 | 3.65 | 10.52 | |
| 11 | Pickup Truck - 3/4 ton | 285 | 8.37 | 0.36 | 0.46 | 2.36 | 7.13 | 9.49 | 18.68 | |
| 11 | Utility Trailer | 150 | 0.56 | 0.03 | 0.04 | 0.28 | 0.00 | 0.28 | 0.91 | |
| 11 | Weed Sprayer 100 Gal | 150 | 2.05 | 0.08 | 0.11 | 1.21 | 0.00 | 1.21 | 3.45 | |

UC COOPERATIVE EXTENSION
Table 8. OPERATIONS WITH EQUIPMENT and MATERIALS
 SACRAMENTO VALLEY and SAN JOAQUIN VALLEY 2011

| Operation | Operation Month | Tractor | Implement | Non-Machine Labor Hrs | Material | Broadcast Rate/acre | Unit |
|------------------------------------|-----------------|-----------|-----------------|-----------------------|--------------------|---------------------|------|
| Prune: Hand | January | | | 17.25 | | | |
| | February | | | 17.25 | | | |
| Prune/Tree Wire: Wire Repair | January | | | 1.50 | | | |
| Prune: Shred Prunings | March | 66HP 2WD | Mower-Flail | | | | |
| Prune: Summer Prune | June | | | 12.00 | | | |
| Thin Fruit | June | | | 52.00 | | | |
| Prop Limbs | July | 55HP 2WD | Utility Trailer | 2.00 | | | |
| Remove Props | August | 55HP 2WD | Utility Trailer | 1.00 | | | |
| Disease/Insect: Dormant Spray | February | 66HP 2WD | Orchard Sprayer | | Oil | 5.00 | ga; |
| | | | | | Kocide (Cu) | 10.00 | lb |
| | | | | | Dimilin | 14.00 | floz |
| Disease: Brown Rot @ partial bloom | February | 66HP 2WD | Orchard Sprayer | | Pristine | 12.00 | oz |
| Disease: Brown Rot @ full bloom | March | 66HP 2WD | Orchard Sprayer | | Indar | 2.00 | oz |
| Disease: Mildew | March | 66HP 2WD | Orchard Sprayer | | Quintec | 7.00 | floz |
| Disease: Mildew, Rust | April | 66HP 2WD | Orchard Sprayer | | Sulfur (wetttable) | 10.00 | lb |
| | May | 66HP 2WD | Orchard Sprayer | | Sulfur (wetttable) | 10.00 | lb |
| Insect: PTB, OFM | May | 66HP 2WD | Orchard Sprayer | | Asana | 9.60 | floz |
| | | | | | Checkmate OFM | 1.30 | floz |
| | July | 66HP 2WD | Orchard Sprayer | | Altacor | 4.00 | oz |
| | | | | | Checkmate OFM | 1.30 | floz |
| | August | 66HP 2WD | Orchard Sprayer | | Asana | 9.60 | floz |
| | | | | | Checkmate OFM | 1.30 | floz |
| Insect: PTB, OFM, Mites | June | 66HP 2WD | Orchard Sprayer | | Intrepid | 12.80 | floz |
| | | | | | Checkmate OFM | 1.30 | floz |
| | | | | | AgriMek | 12.80 | floz |
| Disease: Shothole, PLC | November | 66HP 2WD | Orchard Sprayer | | Ziram | 8.00 | lb |
| Irrigate: | April | | | 0.30 | Water | 5.25 | acin |
| | May | | | 0.60 | Water | 10.50 | acin |
| | June | | | 0.60 | Water | 10.50 | acin |
| | July | | | 0.60 | Water | 10.50 | acin |
| | August | | | 0.30 | Water | 5.25 | acin |
| Weed: Spot Spray | April | 66HJP 2WD | Weed Sprayer | | Roundup | 0.30 | pt |
| | June | 66HP 2WD | Weed Sprayer | | Gramoxone | 0.30 | pt |
| Weed: Mow Middles | April | 66HP 2WD | Mower-Flail | | | | |
| | May | 66HP 2WD | Mower-Flail | | | | |
| | June | 66HP 2WD | Mower-Flail | | | | |
| | July | 66HP 2WD | Mower-Flail | | | | |
| Weed: Dormant Strip | October | 66HP 2WD | Weed Sprayer | | Roundup | 1.00 | pt |
| | | | | | Matrix | 1.32 | oz |
| | | | | | Surflan | 1.50 | pt |
| Fertilize: N | April | | | | UN32 | 26.67 | lb N |
| | June | | | | UN32 | 26.67 | lb N |
| | August | | | | UN32 | 26.67 | lb N |
| Fertilize: Leaf/Nutrition Analysis | July | | | | Analysis | | |
| Harvest: Field Bin Distribution | August | 66HP 2WD | Bin Trailer | | | | |
| | | | Bin Trailer | | | | |
| | | 55HP 2WD | Bin Trailer | | | | |
| | | | Bin Trailer | | | | |
| Hand Pick & Field Sort Fruit | August | Contract | | | | | |