

Additional Notes: Establishment of Walnut Orchard
San Joaquin County

Data Base: Cost of Establishing a Walnut Orchard in San Joaquin Co.
 November 1980
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80 acre orchard; 48 trees per acre

Year 1

A. Operating Inputs

1. Land preparation
 - a. custom rip @ \$10.00
 - b. custom level @ \$ 5.00
2. Planting
 - a. survey 3 hrs. @ \$5.40
 - b. digging 4 hrs. "
 - c. auger rental, additional labor @ \$9.20 per acre
 - d. plant, prune, paint 5 hrs. @ \$4.20
 - e. trees 48 @ \$8.55
 - f. stakes 48 @ \$3.00
3. Cultural
 - a. train, prune, tie 5 hrs. @ \$4.20
 - b. hoe 4 hrs. "
 - c. pesticide app.: rig rental
 - d. pesticide material @ \$1.00 per acre

B. Machinery Requirements

- | | | |
|--------------------------|--------------|---|
| 1. Disc-tandem | 1x Oct. | Land preparation |
| | 3x May-Aug | Cultivation following irrigation. |
| 2. Tractor 40hp | 2hr Jan-Feb | Auger rental |
| | 1.5hr Aug | Pesticide application |
| 3. Irrig. tank & trailer | 1x Jan | Watering @ planting |
| 4. Furrower | 1.2x Apr-Aug | 3x prior to irrigations (40% acreage covered) |

C. Irrigation Requirements

Furrow irrigation system
 50 hp pump
 9 acin per year, 11 irrigations
 District water cost @ \$20.00/acft

Year 2

A. Operating Inputs

1. dormant prune 4 hrs. @ \$5.40
2. nitrogen 12.50 lbs @ \$.30
3. fertilizer application @ \$13.65 per acre
4. train, prune, tie 5 hrs. @ \$4.20
5. hoe 3 hrs. @ \$4.20

- 6. pesticide application 2x @ \$3.36
- 7. pesticide 2x @ \$2.50

B. Machinery Requirements

- 1. Flatbed trailer Nov-Mar Brush removal
- 2. Disc 6x May-Jul Cultivation between irrigations
- 3. Tractor 40hp 3hrs Jun, Aug Pesticide application
- 4. Furrower 1.6x May-Aug 4x prior to irrigations (40% acreage covered)

Year 3

A. Operating Inputs

- 1. dormant prune 5 hrs. @ \$5.40
- 2. pesticide materials 2x @ \$5.00 per acre

B. Machinery Requirements

- 1. Flatbed trailer Nov-Mar Brush removal
- 2. Disc 6x May-Jul Cultivation between irrigations
- 3. Tractor 40hp 3hrs Jun, Aug Pesticide application
- 4. Furrower 1.6x May-Aug 4x prior to irrigations (40% acreage covered)

C. Irrigation Requirements

10.5 acin per year @ \$20.00/acft
4 irrigations

Year 4

A. Operating Inputs

- 1. pruning labor (additional) 1 hr. @ \$4.20 Nov-Mar
- 2. nitrogen 25 lbs @ \$.30
- 3. pesticide materials 2x @ \$7.50

B. Machinery Requirements

- 1. Pruning tower Nov-Mar 8 labor hours
- 2. Brush rake " Brush removal
- 3. Disc 6x May-Jul Cultivation between irrigations
- 4. Sprayer (PTO) 2x Jun, Aug Pesticide application
- 5. Furrower 1.6x May-Aug 4x prior to irrigations (40% acreage covered)

C. Irrigation Requirements

13.5 acin per year @ \$20.00/acft
4 irrigations

Year 5

- A. Production
Yield: .25 ton (dry) per acre @ \$700/ton
- B. Operating Inputs
1. Preharvest
 - a. nitrogen 40 lb @ \$.30
 - b. pesticide material 2x @\$15.00/acre Jun, Aug
 2. Harvest
 - a. custom harvest .25 ton @\$350.00
 - b. haul, hull, dry " @\$ 75.00
- C. Irrigation Requirements
21 acin per year @ \$20.00/acft
4 irrigations

Year 6

- A. Production
Yield: .5 ton (dry) per acre @ \$700/ton
- B. Operating Inputs
1. Preharvest
 - a. pruning labor (additional) 1hr @ \$4.20
 - b. nitrogen 75 lb @ \$.30
 - c. pesticide material 2x @\$20.00 Jun, Aug
 2. Harvest
 - a. custom harvest .5 ton @\$100.00
 - b. haul, hull, dry " @\$ 75.00
- C. Machinery Requirements
1. Tandem disc & cultipacker 1x Sept Harvest preparation " "
 2. Orchard plane 1x " " "
 3. Roller 1x " " "
- D. Irrigation Requirements
24 acin per year @ \$20.00/acft
4 irrigations

Year 7

- A. Production
Yield: 1 ton per acre @ \$700/ton
- B. Operating Inputs
1. Preharvest
 - a. nitrogen 100 lb @ \$.30
 - b. pesticide material 2x @\$25.00
 2. Harvest
 - a. custom harvest 1 ton @\$75.00

b. haul, hull, dry 1 ton @\$75.00

C. Irrigation Requirements

30 acin per year @ \$20.00/acft
4 irrigations

Year 8.

A. Production

Yield: 2 tons per acre @ \$700/ton

B. Operating Inputs

1. Preharvest

a. nitrogen	100 lb	@ \$.30
b. pesticide materials	2x	@\$30.00

2. Harvest

a. custom harvest	2 ton	@\$60.00
b. haul, hull, dry	"	@\$75.00

C. Irrigation Requirements

33 acin per year @ \$20.00/acft
4 irrigations