

Concord grape marketing options

Carter Price, Justin R. Morris, and David A. Kirchner

Fresh fruit marketing firms have paid premium prices for a relatively small portion of northwest Arkansas' Concord grape harvest (Table 1). However, when growers consider the addition of fresh Concord grape sales to their marketing strategy, the evaluation should include the proportion of total yield that would meet grade and quality standards for fresh market grapes, and their contract agreement for the remainder of the crop.

Exclusive of harvesting, marketing and land and management charges, irrigated Concord grape production costs have been estimated as follows: (1) pre-harvest variable-\$520.00 to \$571.00 per acre; plus (2) fixed costs-\$610.00 to \$707.00 per acre. Yields have been estimated to range from 6.65 tons per acre with both the Bilateral Cordon and the Umbrella Kniffin trellis systems to 8.55 tons per acre with the Geneva Double Curtain trellis. Average total pre-harvest costs for 1987 were estimated at \$1,235 per acre, or \$186 per ton for the Bilateral Cordon Trellis at a yield of 6.65 tons per acre. Concord grapes for processing are mechanically harvested. Custom machine harvesting services have been offered in the area for \$35 per ton which includes an average haul to the juicing plant in Springdale. At the \$240 per ton price projected for the 1987 juice grape crop, returns would be

Table 1. Prices offered to Concord growers: packed fresh market grapes and juice grapes, 1984 through 1987, Northwest Arkansas.

Year	Fresh Market Grapes		Juice Processing Grapes
	U.S. Fancy	U.S. #1	
	----- Dollars Per Ton -----		
1984	\$525	\$465	170
1985	550	480	220
1986	570	520	221*
1987	550	500	240*

Data Sources: 1) Fresh Market Table Grapes Prices: Wholesale Buying Firm Venture Vineyards, Inc., Lodi, NY. 2) Juice Grape Prices: Growers Consensus Reports. *Subject to increases after accounting is completed in final settlement for juice products which have been processed and sold. These increases would apply only to acreage planted and produced under marketing contract, with the National Grape Co-operative, Springdale, AR.

\$19 per ton or \$126 per acre (yield of 6.65 tons per acre).

While pre-harvest production costs would be the same, additional harvesting/packing variable costs would be charged to U.S. # 1 Concord fresh market grape sales. These costs have been reported by one broker to come to \$185 per ton (Table 2). Box materials and assembly provided by the buyer were charged to the grower at \$25 for the 100 20-1b boxes required for each ton of packed grapes. In this example, pickers were paid \$1.00 per 20-lb box. The hand harvest rate averaged 36 boxes per picker for a 6-hour

day. In a well managed vineyard with 75% of the grape clusters meeting fresh market standards, an average size picking crew of twelve would be expected to pack 432 boxes of grapes per day.

Distribution and pick-up of boxes was estimated to require two persons working a 10-hour day. At \$3.75 per hour for labor and \$15 per day for fuel, the total cost was \$90 for 4.32 tons per day or \$20.83 per ton. The average crew of 12 pickers required a 10-hour day for a supervisor. The inspector would work an 8-hour day checking grade quality and the weight of filled boxes. At \$4.50 per hour, the cost for the supervisor/inspection function would be \$18.75 per ton. Trucking expense was estimated at \$9.26 per ton bringing the total to \$184.53 per ton (Table 2).

After deducting \$186 per ton for total pre-harvest costs plus \$185 per ton for harvesting/packing costs from a \$550 per ton price for fresh market grapes, returns would be \$179 per ton (excluding fixed costs for the packing operation). However, the following limitations should be considered: (1) previously existing juice processing contracts and (2) harvest labor availability.

Concord grape vineyards in Northwest Arkansas have traditionally been established for and targeted toward juice marketing contracts with the National Grape Cooperative, Inc. Grower-members have benefited from this stable market for 60 years. Contract growers were allowed in 1986 to make a split of their acreage. As much as 8% of the total crop could be harvested as fresh market grapes. At 8% of a 6.65-ton-per-acre crop, the fresh market grape sales would increase returns by \$95, bringing the total to \$211 per acre. As the proportion of fresh market grape sales increased to 16% and 24% of the crop, returns would be \$297 and \$382 per acre.

However, the price for fresh market Concord grapes may be sensitive to increased supply. This market sector has never been a dominant factor for Concord and its strength and depth remain relatively untested. If there were an increasing shift to fresh market sales, outlets and seasonal cooling capacity would need to be increased. There could be a shortage of harvesting labor for an area where the grape harvest has become almost 100% mechanized. Based on the example of harvesting and packing (Table 2), labor requirements would be 25.5 hrs per ton. In the 1987 season, it was estimated that the annual Concord fresh market grape sales from Northwest Arkansas had increased to 450 tons or approximately 10% of the crop. At the estimated rate this existing volume translates into 11,460 hours of labor within a 3week period. While fresh market sales may present a continuing profitable complement for Concord grapes, growers must be aware of these and other limitations.

Table 2. Concord fresh market grape harvesting costs, 1987.

Variable Cost Item	\$20-lb Box	\$/ton ¹
Materials		
Boxes	0.25	25.00
Fuel	0.035	3.47
Labor (Hours/ton)		
Picking (16.67)	1.00	100.00
Supervisor (2.31)	0.104	10.42
Inspection (1.85)	0.083	8.33
Distribution		
Pickup (4.63)	0.174	17.36
FICA tax	0.1069	10.69
Trucking	0.0926	9.26
Total		184.53

Source: "1987 Table Grape Income and Expense Report", Venture Vineyards, Inc, Lodi, NY 14860 and Springdale, AR 72764.

¹Fixed costs were not included for facilities needed to support table grape harvest: a) Barn or storage for assembled boxes. b) Tractor and trailer to collect filled boxes. c) Truck w/raim canvas. d) Picking shears, record book, table, markers, etc.

