

# Oregon Apple Prices

By Variety, Grade, and Size  
1922-1926



Agricultural Experiment Station  
Oregon State Agricultural College  
CORVALLIS

and

Bureau of Agricultural Economics  
United States Department of Agriculture  
COOPERATING

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## SUMMARY

Commercial apple production throughout the United States has been struggling in recent years against severe competition both of one region against another in the enterprise itself, and from an increasing supply of other fruits.

Detailed prices by variety, grade, size, year, and district were obtained from the book records of cooperative and independent shippers covering 9,607,119 boxes of graded and packed apples in the seven important apple districts of Oregon, 1922-1926.

The Yellow Newtown and Esopus Spitzenburg were the most important varieties studied, comprising 51.4 percent and 23.5 percent respectively of the total. These varieties together with seven other—Ortley, Jonathan, Rome Beauty, Arkansas Black, Delicious, Winesap, and Winter Banana—composed nearly 97 percent of the total boxes included in the study. Thirteen other varieties contributed only 3.4 percent of the total boxes. Each of the seven districts has two or three major varieties and many others of minor commercial importance.

The relative purchasing power of apples has been low, exceeding the average 1910-1914 purchasing power for only three of the seventeen years, 1910 to 1926. It went as low as 68 percent in 1916 and as high as 112 percent in 1911.

The average price received by growers for apples packed and delivered at shipping point during the five-year period 1922-1926, was \$1.00 per box. The weighted average yearly price fluctuated from 76c to \$1.46 per box. The price of different varieties ranged from 33c to \$1.39 per box.

In general, the important varieties grown in the Hood River district brought the highest prices for the five years; those of the Rogue River district ranked second; those of the Milton-Freewater district, third; those of the Mosier Valley district, fourth; and those of the Willamette Valley district, fifth.

The weighted average prices for "Extra Fancy" apples was \$1.25 per box, or 25c per box higher than the average price of all grades, which was \$1.00 per box. The "Fancy" grade brought 95c and the "Choice" grade 69c per box.

Of the total boxes studied 35.4 percent were graded as "Extra Fancy"; 44.7 percent as "Fancy"; 15.9 percent as "Choice"; 2.9 percent as "Combination"; and 1.1 percent as "Orchard Run."

There was considerable variation in the percentage of different grades as between varieties, years, and districts.

In general the largest-size apples brought the highest average price. During three of the five years, however, owing to size preference in European markets, medium-size Yellow Newtown brought 2c to 26c more per box than the larger size of this variety.

Of the eight leading varieties studied, 43 percent were of the larger sizes (125 or less apples per box); 31 percent were of the medium sizes (138 to 163 apples per box); and 25 percent were of the smaller sizes (175 or more apples per box). One percent of the total boxes studied were not reported by size.

The Milton-Freewater district had the largest percentage of apples of the larger-size group (66 percent). The Rogue River and Hood River districts were next with 46 percent and 44 percent respectively.

Of the apples included in the study for 1922-1925, 29 percent were sent to export markets; 31.7 percent were absorbed in the Pacific Coast states; 20.1 percent were sold to the Middle Atlantic states; and the remaining 19.2 percent were shipped to cities in all other geographic regions of the United States.

The leading varieties exported were Yellow Newtown (70 percent of total exported), Esopus Spitzenburg (12 percent), Ortley, Jonathan, Arkansas Black, and Delicious.

# Oregon Apple Prices

## By Variety, Grade, and Size, 1922-1926

By

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### INTRODUCTION

Commercial apple production throughout the United States has been struggling in recent years against severe competition, both of one region against another in the enterprise itself, and from an increasing supply of other fruits.

Since both the enterprise and the market for this product are national in character, the apple-producing states east and west have undertaken through their state experiment stations, in cooperation with the United States Bureau of Agricultural Economics, to make a nationwide study of the whole industry, to determine as fully as possible its present situation and future possibilities.

The Oregon Agricultural Experiment Station in cooperation with the United States Bureau of Agricultural Economics has joined in this study. The first part of the study undertaken is reported herein.

### SCOPE OF STUDY

The prices on which the studies and tabulations covered in this bulletin were based were obtained directly from the book records of cooperative and independent shippers in the seven major apple-growing sections of the state. Prices were thus obtained on a total of 9,607,119 boxes of graded and packed apples of 22 different varieties over a period of five years, 1922-1926, inclusive (Table I).

The total quantity of apples for which prices were obtained represents 42.5 percent of the total commercial apple production of Oregon for this five-year period.

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TABLE I. QUANTITY OF APPLES INCLUDED IN STUDY, BY VARIETY, 1922-1926.

Variety	Total quantity		Quantity by years			
	5 years	1922	1923	1924	1925	1926
Yellow Newtown .....	4,933,512	759,183	909,366	1,063,341	847,454	1,354,168
Esopus Spitzenburg .....	2,254,885	373,350	421,018	559,052	228,743	672,722
Ortley .....	532,776	86,148	84,099	139,799	61,514	161,216
Jonathan .....	347,026	54,021	77,628	47,670	73,001	94,706
Rome Beauty .....	333,077	17,009	64,602	11,094	130,990	109,382
Arkansas Black .....	268,997	43,798	39,461	63,518	48,204	74,016
Delicious .....	233,226	34,102	35,779	39,397	51,409	72,539
Winesap .....	194,667	7,333	29,202	6,669	68,771	82,692
Winter Banana .....	183,706	32,905	23,287	38,357	28,339	60,818
Gravenstein .....	90,993	12,511	14,745	13,743	12,343	37,651
Arkansas (Black Twig) .....	59,273	14,752	12,898	13,210	11,339	7,074
Grimes Golden .....	29,384	7,226	5,469	3,506	3,654	9,529
Red Cheek .....	28,004	4,687	6,524	4,744	6,529	5,520
Hyde King .....	27,023	4,755	7,853	3,152	9,895	1,369
Tompkins King .....	26,857	3,333	2,933	7,490	4,468	8,633
Wagener .....	14,966	4,899	5,492	2,268	2,307	.....
Northern Spy .....	11,340	.....	2,268	3,024	2,268	3,780
Miscellaneous* .....	37,407	2,590	2,268	.....	26,082	6,467
<b>Total .....</b>	<b>9,607,119</b>	<b>1,462,602</b>	<b>1,744,892</b>	<b>2,020,034</b>	<b>1,617,310</b>	<b>2,762,281</b>

\* Miscellaneous includes Wealthy, York Imperial, Ben Davis, McIntosh, and King David varieties.

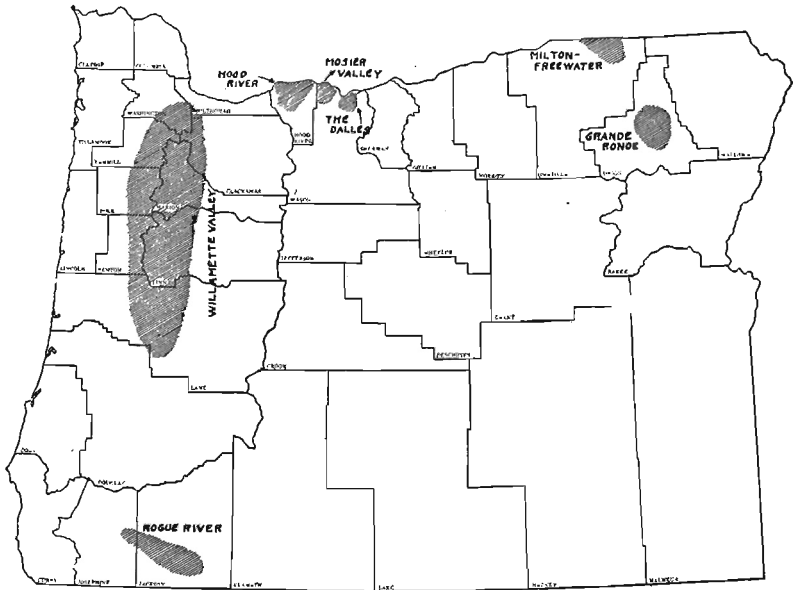


Fig. 1. The shaded parts of the map indicate the location of the Oregon apple districts from which price data were obtained. The number of boxes covered in the study is shown for each district in Table II.

The location of each district from which price data were obtained is shown in Fig. 1.

Hood River is the leading apple district of Oregon. The number of boxes of Hood River apples included, 83 percent of the total number studied, is slightly out of proportion. The actual car-load shipments from this district are only 64 percent of the total shipments from the seven districts. While the study does not cover all production in Oregon, the figures in Table II indicate closely the relative importance of the commercial crop by districts. The larger number of boxes included in the study from the Hood River district, therefore, does not materially impair the correctness of the conclusions of this report (Table II).

TABLE II. QUANTITY OF APPLES INCLUDED IN STUDY AND CAR-LOAD SHIPMENTS, BY DISTRICTS, TOTALS FOR THE FIVE YEARS, 1922-1926.

Districts	Quantity included in study		Car-load shipments*	
	<i>boxes</i>	<i>%</i>	<i>cars</i>	<i>%</i>
Hood River .....	7,983,385	83.3	16,680	64.0
Milton-Freewater .....	511,354	5.3	2,693	10.3
Willamette Valley .....	352,333	3.7	1,787	6.9
Mosier Valley .....	320,686	3.3	921	3.5
Rogue River Valley .....	283,736	3.0	2,345	9.0
Grande Ronde Valley .....	146,606	1.5	1,556	6.0
The Dalles .....	9,039	.9	90	.3
Total .....	9,607,119	100.0	26,072	100.0

\* Car-load shipments reported by the Federal Bureau of Agricultural Economics. The shipments indicated for each district are composed of shipments reported for the following counties: Hood River—Hood River; Milton-Freewater—Umatilla; Willamette Valley—Washington, Benton, Yamhill, Lane, Multnomah, Marion, and Douglas; Mosier Valley—shipments reported from Dufur and Mosier of Wasco county; Rogue River—Jackson and Josephine; Grand Ronde Valley—Union; The Dalles—shipment from The Dalles, Wasco county.

## VARIETIES STUDIED

The Yellow Newtown and Esopus Spitzenburg were the most important varieties studied, comprising 51.4 and 23.5 percent respectively of the total. These varieties, together with seven others—Ortley, Jonathan, Rome Beauty, Arkansas Black, Delicious, Winesap, and Winter Banana—composed nearly 97 percent of the total boxes included in the study. Thirteen other varieties contributed only 3.4 percent of the total boxes. Each of the seven districts has two or three major varieties, and many others of minor commercial importance (Table III).

TABLE III. RELATIVE IMPORTANCE OF VARIETIES BY DISTRICTS, AS INDICATED BY PRODUCTION INCLUDED IN THE STUDY.

Variety	All seven districts	Hood River	Milton-Freewater	Willamette Valley	Mosier Valley	Rogue River Valley	Grande Ronde Valley	The Dalles
	%	%	%	%	%	%	%	%
Yellow Newtown .....	51.4	55.4	0.6	32.9	48.7	80.6	2.4	32.5
Esopus Spitzenburg ..	23.5	25.3	.....	10.4	51.3	12.4	.....	25.8
Ortley .....	5.5	6.3	.....	8.5	.....	1.4	.....	2.1
Jonathan .....	3.6	2.4	12.0	19.0	.....	2.7	13.9	.....
Rome Beauty .....	3.5	.....	46.8	3.5	.....	.....	55.2	2.2
Arkansas Black .....	2.8	3.3	1.1	.5	.....	*	.....	1.5
Delicious .....	2.4	2.4	5.6	1.1	.....	1.0	4.1	.....
Winesap .....	2.0	.2	32.6	2.0	.....	.9	.....	.....
Winter Banana .....	1.9	2.1	.9	.8	.....	.8	2.0	33.1
Gravenstein .....	.9	1.0	.....	2.3	.....	.1	.....	.....
Arkansas (Black Twig)	.6	.8	.....	.....	.....	.....	.....	.....
Grimes Golden .....	.3	.....	.3	7.9	.....	.....	.....	.....
Red Cheek .....	.3	.3	.....	.2	.....	.....	.....	.....
Hyde King .....	.3	.3	.....	.....	.....	.....	.....	.....
Tompkins King .....	.3	.2	.....	2.4	.....	.....	.....	.....
Wagener .....	.2	.....	.....	4.0	.....	.....	.5	2.8
Northern Spy .....	.1	.....	.....	3.2	.....	.....	.....	.....
Miscellaneous † .....	.4	.....	.1	1.3	.....	.1	21.9	.....
Total .....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

\* Less than 1/10 of 1 percent.

† Miscellaneous varieties include Wealthy, York Imperial, Ben Davis, McIntosh, and King David.

It would seem that there is an excessively large number of minor varieties.



PURCHASING POWER OF APPLES

The relative purchasing power of apples has been low, exceeding the average 1910-1914 purchasing power for only three of the seventeen years 1910-1926. It went as low as 68 percent in 1916, and as high as 112 percent in 1911 (Table IV).

TABLE IV. RELATIVE PURCHASING POWER OF APPLES.\*

Year	Relative purchasing power	Year	Relative purchasing power
1910 to 1914 .....	100	1918 .....	76
1910 .....	100	1919 .....	97
1911 .....	112	1920 .....	85
1912 .....	91	1921 .....	104
1913 .....	86	1922 .....	99
1914 .....	105	1923 .....	85
1915 .....	76	1924 .....	82
1916 .....	68	1925 .....	93
1917 .....	69	1926 .....	79

\* Taken from "Index Numbers of Farm Prices" by the Bureau of Agricultural Economics, United States Department of Agriculture.

Based on estimated prices of apples received by producers in the United States and on index numbers of wholesale prices of non-agricultural commodities.

Since apple prices rise and fall, the purchasing power will rise or fall, according to the movement of non-agricultural prices. As used here, relative purchasing power of apples means the value of a unit of apples in exchange for non-agricultural products at wholesale prices compared with pre-war exchange value.

For fourteen years of the period covered in Table IV it required a greater amount of apples to purchase one dollar's worth of non-agricultural commodities than it did during the five-year period 1910-1914, which is taken as the normal.

The 1926 apple crop was exceptionally large and the farm price was relatively low compared with the price of the things the farmer buys. A bushel of apples would buy only 79 percent as much non-agricultural products as it would during the period 1910-1914. In 1921 the apple crop was light, prices were good, and a bushel of apples would buy 4 percent more non-agricultural products than it would from 1910 to 1914.

The farm prices of apples have been relatively lower, in general, since 1910 than the prices of non-agricultural goods. The difference between these prices has been more pronounced since 1915 (Fig. 2).

According to the agricultural outlook for 1928 the apple industry as a whole is gradually approaching a more stabilized condition, and although it is probable that commercial apple production for the country as a whole will continue to increase for the next five or ten years, the rate of increase is likely to be less than during the last decade. Production in the Northwest appears to have about reached its peak, and only moderate increases are expected in most other important apple sections.

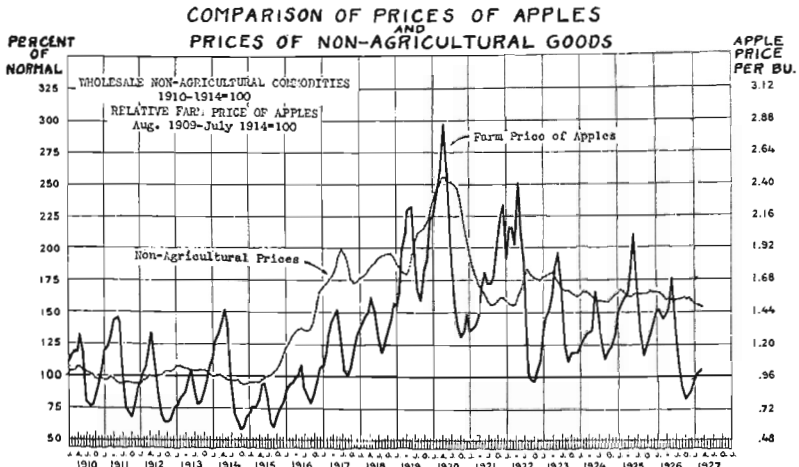


Fig. 2. During the 17 years 1910-1927 apple prices have been generally below the prices of non-agricultural products.

### APPLE PRICES RECEIVED BY OREGON GROWERS

During the five-year period 1922-1926, the average price received by Oregon growers for apples packed and delivered at shipping point was \$1.00 per box. This means that on the average growers received \$1.00 per box for growing, harvesting, grading, packing, and delivering the apples to shipping point (Table V).

TABLE V. OREGON APPLE PRICES, BY VARIETY, 1922-1926.\*

Variety	Weighted average price per box for all grades and sizes					5-year average
	1922	1923	1924	1925	1926	
Yellow Newtown .....	\$0.92	\$0.79	\$1.54	\$1.27	\$0.87	\$1.07
Esopus Spitzenburg .....	.77	.76	1.33	1.22	.64	.92
Ortley .....	.82	.75	1.38	1.42	.80	1.02
Jonathan .....	.58	.63	.88	1.00	.71	.75
Rome Beauty .....	.62	.55	1.16	.95	.65	.76
Arkansas Black .....	1.02	.77	1.75	1.09	.80	1.11
Delicious .....	1.16	1.12	2.24	1.26	1.14	1.39
Winesap .....	.93	.75	1.40	1.22	.85	.99
Winter Banana .....	.65	.65	1.37	1.25	.80	.95
Gravenstein .....	.63	.96	1.46	1.36	1.23	1.16
Arkansas (Black Twig) .....	.25	.25	1.18	.71	.33	.55
Grimes Golden .....	.58	.41	1.00	1.03	.47	.62
Red Cheek .....	.55	.70	1.31	.78	.68	.79
Hyde King .....	.63	.63	1.31	.70	1.05	.76
Tompkins King .....	.47	.64	1.28	.82	.72	.85
Wagner .....	.41	.16	.31	.58	.....	.33
Northern Spy .....	.....	.28	.80	1.00	.49	.63
Miscellaneous varieties † .....	.74	.39	.....	.27	.46	.35
Average, all varieties .....	\$0.84	\$0.76	\$1.46	\$1.19	\$0.79	\$1.00

\* Prices received by growers for apples packed and delivered at shipping point.

† Miscellaneous varieties include Wealthy, York Imperial, Ben Davis, McIntosh, and King David.

Wide fluctuation in apple prices by years. There is a wide variation in prices from year to year; this variation is probably more important to the grower than the weighted average price for five years. The price for two of the five years was well above the five-year average, while for each of the other three years it was considerably below the average (Fig. 3).

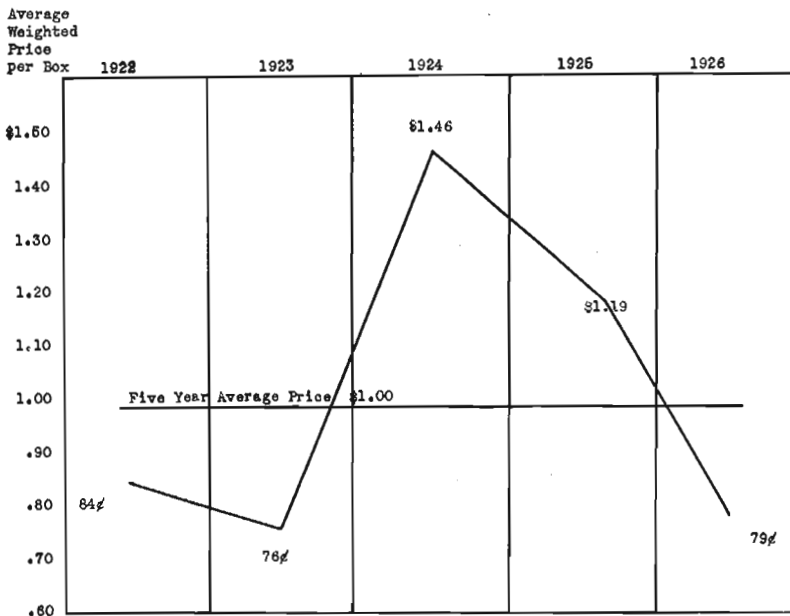


Fig. 3. United States production and car-lot shipments have a decided influence on Oregon apple prices. During years of exceptionally heavy production, like 1926, when a part of the crop is not harvested, total production influences price more than do car-lot movements.

Many factors influenced price variation among individual lots of apples, such as quantity available in the market, variety, grade, size, and condition.

With the present method of storage and transportation the United States production of apples rather than the production from any particular district has much to do with the seasonal price. During some years the price is more closely related to volume of car-lot shipment than to actual total production in the orchard, and during some years the opposite is true. Movement by automobile, truck, and in less than car-lot quantities affects the price also, but in years of very heavy production, like 1926, a relatively large part of the crop is not harvested, and it is at such times that total orchard production greatly influences price.

Wide fluctuation in apple prices according to variety. Prices of different varieties range all the way from \$0.33 to \$1.39 per box, according to the variety (Fig. 4).

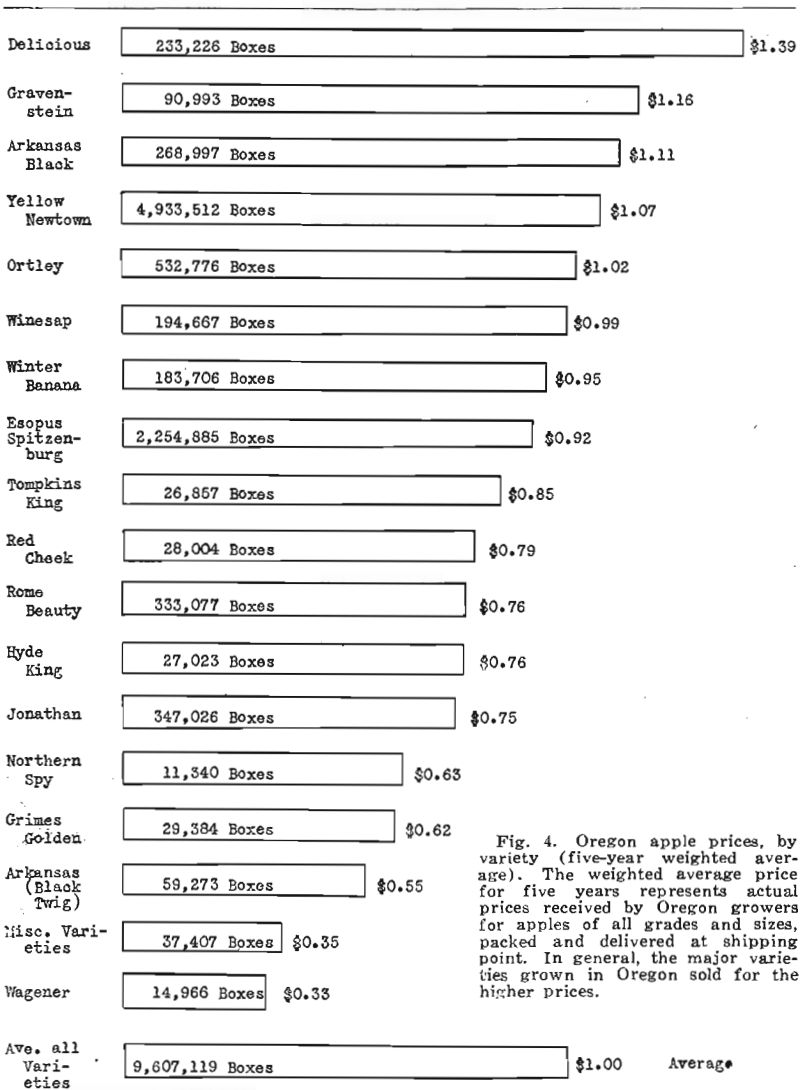


Fig. 4. Oregon apple prices, by variety (five-year weighted average). The weighted average price for five years represents actual prices received by Oregon growers for apples of all grades and sizes, packed and delivered at shipping point. In general, the major varieties grown in Oregon sold for the higher prices.

In general, the relatively unimportant varieties as measured by quantity sold brought lower prices than the more extensively grown varieties. The average price to growers for some of these was less than \$0.40 per box, which was generally not enough to cover cost of harvesting and packing the fruit. While it is not likely that the price differentials exactly measure consumer preferences for certain varieties, they do represent differences in what the growers are actually receiving over a period of years.

PRICES VARY IN DIFFERENT DISTRICTS

During four of the five years studied the prices received by the growers in either or both the Hood River and Rogue River districts were higher than the prices received by the growers of the other districts. In some years the differences were rather marked, and in other years they were only slight (Table VI).

TABLE VI. WEIGHTED AVERAGE PRICES PER BOX, BY DISTRICTS.\*

District	1922	1923	1924	1925	1926	5-year average
Hood River .....	\$0.88	\$0.79	\$1.48	\$1.26	\$0.80	\$1.04
Milton-Freewater .....	1.13	.66	1.14	1.16	.82	.91
Willamette Valley .....	.61	.47	1.08	1.12	.70	.73
Mosier Valley .....	.65	.78	1.10	1.13	.77	.85
Rogue River Valley .....	.76	.72	1.22	1.31	.94	.91

\* Data too limited to show yearly prices for the Grande Ronde and The Dalles districts.

The weighted prices are influenced by the proportion of the various varieties grown, by the annual production, grade, size, and condition, so that any district producing a large proportion of the higher-priced varieties would likely show a higher weighted average price for the year.

In general the important varieties grown in the Hood River district brought the highest prices for the five years. Apple prices of the major varieties of the Rogue River district ranked second; those of the Milton-Freewater district third; those of the Mosier district fourth, and those of the Willamette Valley district fifth (Table VII).

TABLE VII. WEIGHTED FIVE-YEAR AVERAGE PRICES FOR IMPORTANT VARIETIES, BY DISTRICTS.\*

Variety	Hood River	Milton-Freewater	Willamette Valley	Mosier Valley	Rogue River Valley
Yellow Newtown .....	\$1.09	\$ .....	\$0.85	\$1.01	\$0.93
Esopus Spitzenburg .....	.94	.....	.64	.71	.89
Ortley .....	1.03	.....	.95	.....	.77
Delicious .....	1.40	1.50	.....	.....	.....
Winesap .....	.....	.92	.....	.....	.....
Rome Beauty .....	.....	.82	.....	.....	.....
Jonathan .....	.....	.77	.87	.....	.74
Arkansas Black .....	1.11	.....	.....	.....	.....
Grimes Golden .....	.....	.....	.62	.....	.....
Weighted average price ....	\$1.05	\$0.91	\$0.76	\$0.85	\$0.92
Percent of total boxes included in study .....	92.7	97.0	70.8	100.0	95.7

\* Only those varieties are included for which prices were obtained during each of the five years, 1922-1926. Sufficient data are not available for the Grande Ronde and The Dalles districts.

In the Willamette Valley district the more highly organized commercial orchards, selling through national marketing agencies, received prices equal to those of any other district.

## GRADE AN IMPORTANT FACTOR

In general the better grades of apples brought the highest prices. "Extra Fancy" apples sold for 25c per box more than the average price of all apples, 30c above the price received for "Fancy," and 56c more than the price of "Choice" apples (Table VIII).

TABLE VIII. OREGON APPLE PRICES, BY GRADE.\*

Variety	Grade			Percentage of total boxes represented by three grades
	Extra Fancy	Fancy	Choice	
				%
Yellow Newtown .....	\$1.28	\$1.00	\$0.78	99
Esopus Spitzenburg .....	1.19	.85	.58	99
Ortley .....	1.23	.88	.69	100
Jonathan .....	.87	.78	.48	80
Rome Beauty .....	.89	.82	.67	76
Arkansas Black .....	1.30	.95	.68	99
Delicious .....	1.63	1.20	.93	96
Winesap .....	1.00	1.03	.82	99
Winter Banana .....	1.35	.85	.50	99
Gravenstein .....	.85	.71	.80	30
Arkansas (Black Twig) .....	.....	.....	.46	31
Grimes Golden .....	.84	.66	.52	76
Red Cheek .....	1.12	.82	.55	99
Hyde King .....	1.01	.75	.50	100
Tompkins King .....	1.30	.88	.61	78
Wagener .....	.51	.17	.15	42
Northern Spy .....	.74	.58	.32	80
Miscellaneous .....	.71	.41	.48	26
Weighted average price, all varieties .....	\$1.25	\$0.95	\$0.69	96

\* Weighted average price (for five years 1922-1926) received by Oregon growers for apples packed and delivered at shipping point.

In some of the varieties the price range between grades was pronounced, and with others the difference was so slight that other factors, such as date of selling, condition of fruit when put on the market, and proportion of the different grades sold during periods of various price levels probably influenced the price even more than grade.

The Yellow Newtown, Esopus Spitzenburg, Ortley, Arkansas Black, and Delicious were the leading varieties with a relatively high percentage of "Extra Fancy." These same varieties, as well as the Rome Beauty, Winesap, Winter Banana, Red Cheek, and Hyde-King, were prominent in the "Fancy" grade. Nearly 70 percent of the Gravenstein and Arkansas (Black Twig) apples were in the combination grade, and the Rome Beauty, Wagener, and a few unimportant varieties which were not tabulated separately were sold as orchard run in relatively large quantity (Table IX).

TABLE IX. PERCENTAGE OF VARIOUS GRADES OF APPLES INCLUDED IN THIS STUDY, BY VARIETY.

Variety	Total quantity (5 years)	Percentage distribution by grade				
		Extra Fancy	Fancy	Choice	Combina- tion	Orchard run*
		<i>boxes</i>	%	%	%	%
Yellow Newtown .....	4,933,512	37	48	14	1	† ....
Esopus Spitzenburg .....	2,254,885	36	43	20	1	† ....
Ortley .....	532,776	44	48	8	† ....	....
Jonathan .....	347,026	29	32	19	15	5
Rome Beauty .....	333,077	9	51	16	6	18
Arkansas Black .....	268,997	53	36	10	1	† ....
Delicious .....	233,226	49	35	12	4	....
Winesap .....	194,667	33	51	16	† ....	† ....
Winter Banana .....	183,706	29	53	17	1	† ....
Gravenstein .....	90,993	† ....	3	27	69	1
Arkansas (Black Twig) ..	59,273	....	....	31	69	....
Grimes Golden .....	29,384	33	35	8	24	† ....
Red Cheek .....	28,004	15	60	24	1	....
Hyde King .....	27,023	19	62	19	....	....
Tompkins King .....	26,857	8	38	32	22	....
Wagener .....	14,966	19	12	11	30	28
Northern Spy .....	11,340	36	24	20	20	....
Miscellaneous .....	37,407	2	14	10	31	43
Total or average .....	9,607,119	35.4	44.7	15.9	2.9	1.1

\* Includes some boxes of apples listed as "Face and Fill."

† Less than one-half of one percent.

Of the 9,607,119 boxes of apples, 96 percent were of three grades "Extra Fancy," "Fancy," and "Choice," and only 4 percent were of "Combination" grade, or sold as "Orchard Run." Prices are not shown for "Combination" and "Orchard Run," since it was not a general practice to pack apples of all grades in all districts during all years in these ways.

On the other hand, in the Grande Ronde Valley district 62.5 percent of the apples included in the study were classified as "Orchard Run," and both the Grande Ronde and Willamette Valley districts produced a large proportion of the "Combination" grade (Table X).

TABLE X. PERCENTAGE OF VARIOUS GRADES OF APPLES INCLUDED IN THIS STUDY, BY DISTRICT.

District	Total quantity (5 years)	Percentage distribution by grade				
		Extra Fancy	Fancy	Choice	Combina- tion	Orchard run
		<i>boxes</i>	%	%	%	%
Hood River .....	7,983,385	38.3	44.6	15.7	1.4	....
Milton-Freewater .....	511,354	17.8	35.0	21.4	5.1	0.3
Willamette Valley .....	352,333	30.5	26.6	17.3	24.7	.9
Mosier Valley .....	320,686	20.8	49.8	26.7	2.7	....
Rogue River Valley .....	283,736	36.5	50.4	5.3	5.3	2.5
Grande Ronde Valley .....	146,606	.6	11.1	6.0	19.8	62.5
The Dalles .....	9,039	36.5	25.6	37.9	....	....
Total .....	9,607,119	35.4	44.7	15.9	2.9	1.1

The districts vary considerably in the proportion of each grade produced. Hood River and Rogue River have very high percentages of the "Extra Fancy" and "Fancy" grades.

A large percentage of the apples were graded as "Extra Fancy" in 1922 and 1924, and an even larger proportion were of the "Fancy" grade in 1926 (Table XI).

TABLE XI. PERCENTAGE OF VARIOUS GRADES OF APPLES INCLUDED IN THE STUDY, BY YEARS.

Year	Total quantity	Percentage distribution by grade				
		Extra Fancy	Fancy	Choice	Combina- tion	Orchard run
	<i>boxes</i>	%	%	%	%	%
1922 .....	1,462,602	47.2	31.9	17.5	3.3	0.1
1923 .....	1,744,892	38.1	40.2	18.9	2.2	.6
1924 .....	2,020,034	42.3	43.4	12.9	1.4	.....
1925 .....	1,617,310	27.7	41.5	23.4	3.2	4.2
1926 .....	2,762,281	26.9	57.2	11.0	3.9	1.0
Five-year total and average .....	9,607,119	35.4	44.7	15.9	2.9	1.1

Variation in the proportion of the crop falling in the respective grades in different years is to be expected: first, because of variation in the percentage of the crop suitable for the better grade; second, because of the degree of exactness with which apples are graded in years of different price levels. For example, when apple prices are low the buyers are more critical, requiring accurate grading, but when apples are scarce and prices high more liberal grading may be done.



LARGER SIZES BRING HIGHER PRICES

In general, average prices of apples decrease as the size decreases. The medium-size apples of the Yellow Newtown variety during three of the five years studied, however, sold from 2c to 26c per box more than the larger size. This was owing mainly to the fact that foreign markets to which a large part of this variety is shipped preferred apples of the medium size (Table XII).

TABLE XII. PRICES TO GROWERS AND RELATIVE IMPORTANCE OF APPLES OF DIFFERENT SIZE, FOR SEVEN LEADING VARIETIES, BY YEARS.

Variety and year	Number of apples per box and price			Distribution by number of apples per box		
	125 or less	138 to 163	175 or more	125 or less	138 to 163	175 or more
Yellow Newtowns				%	%	%
1922 .....	\$1.00	\$0.88	\$0.87	35	38	27
1923 .....	.79	.81	.79	54	26	20
1924 .....	1.66	1.51	1.45	29	35	36
1925 .....	1.37	1.40	1.13	28	27	45
1926 .....	.72	.98	.91	35	35	30
Esopus Spitzenburg						
1922 .....	.93	.70	.49	47	37	16
1923 .....	.80	.71	.60	72	22	6
1924 .....	1.52	1.37	1.00	36	40	24
1925 .....	1.51	1.26	.93	25	49	26
1926 .....	.71	.55	.45	61	31	8
Ortley						
1922 .....	.88	.65	.50	76	23	1
1923 .....	.76	.75	.66	83	13	4
1924 .....	1.47	1.33	1.22	50	34	16
1925 .....	1.48	1.34	1.30	67	23	10
1926 .....	.81	.86	.66	49	34	17
Jonathan						
1922 .....	.79	.61	.43	18	45	37
1923 .....	.81	.61	.61	17	52	31
1924 .....	1.34	.92	.90	16	41	43
1925 .....	1.26	1.03	1.01	15	43	42
1926 .....	.87	.65	.61	33	37	30
Delicious						
1922 .....	1.32	1.01	.61	63	26	11
1923 .....	1.21	1.00	.85	62	28	10
1924 .....	2.68	2.23	1.46	40	38	22
1925 .....	1.68	1.59	1.12	32	31	37
1926 .....	1.46	1.03	.51	50	29	21
Winesap						
1922 .....	1.00	.87	.90	41	27	32
1923 .....	.78	.92	.56	89	1	10
1924 .....	1.72	1.58	1.32	6	24	70
1925 .....	1.37	.89	1.02	63	13	24
1926 .....	.80	.90	.97	65	9	26
Winter Banana						
1922 .....	.70	.48	.25	79	17	4
1923 .....	.73	.24	.73	81	15	4
1924 .....	1.49	1.23	.89	59	29	12
1925 .....	1.38	1.18	.83	59	28	13
1926 .....	.84	.75	.57	73	23	4

The combined boxes of eight leading varieties classified by size show approximately one-half of all apples produced to be of the larger size group; one-third of the medium size, and one-fourth of the smallest size group (Table XIII).

TABLE XIII. PERCENTAGE OF APPLES OF EACH SIZE GROUP, FOR EACH OF EIGHT LEADING VARIETIES (FIVE-YEAR WEIGHTED AVERAGES).

Variety	Quantity studied	Distribution by number of apples per box			
		125 or less	138 to 163	175 or more	Not reported by size*
Yellow Newtowns .....	<i>boxes</i> 4,933,512	% 36	% 32	% 32	% †....
Esopus Spitzenburg .....	2,254,885	51	34	15	†....
Ortley .....	532,776	60	28	12	....
Jonathan .....	347,026	20	40	35	5
Rome Beauty .....	333,077	75	5	2	18
Delicious .....	233,226	48	30	22	....
Winesap .....	194,667	65	10	25	†....
Winter Banana .....	183,706	70	23	7	†....
Eight varieties .....	9,012,875	43	31	25	1

\* Reported as "Face and Fill" or "Orchard run" with sizes not given.

† Less than one-half of one percent.

About one-half of the Esopus Spitzenburg and of the Delicious were of the large size, and about one-third were of the medium size. From 60 to 70 percent of the Ortleys, Winesaps, and Winter Bananas were of the large size, whereas only 20 percent of the Jonathans were of this size. Three-fourths of the Rome Beauty apples were of the largest size group, and 18 percent was classified as "Face and Fills" or "Orchard run."

A wide variation in percentage of apples of each size group in the respective districts for eight leading varieties is indicated in Table XIV.

TABLE XIV. PERCENTAGE OF APPLES OF EACH SIZE GROUP, FOR EIGHT LEADING VARIETIES,\* BY DISTRICTS (FIVE-YEAR WEIGHTED AVERAGE).

District	Varieties included	Quantity of apples included	Per-centage of total apples studied	Distribution by number of apples per box			
				125 or less	138 to 163	175 or more	Not reported by size†
Hood River .....	<i>number</i> 7	<i>boxes</i> 7,506,613	% 94.1	% 44	% 30	% 26	% ....
Milton-Freewater .....	6	504,029	98.5	66	18	16	†....
Willamette Valley .....	8	275,982	78.2	38	34	27	1
Mosier Valley .....	2	320,686	100.0	32	39	29	....
Rogue River Valley .....	7	233,038	99.8	46	19	33	2
Grande Ronde Valley .....	5	113,876	77.6	5	19	10	66
The Dalles .....	5	8,651	95.7	23	45	32	....
Total .....	8	9,012,875	93.8	43	31	25	1

\* Varieties included are Yellow Newtown, Esopus Spitzenburg, Ortley, Jonathan, Rome Beauty, Delicious, Winesap, and Winter Banana. All of these were found in the Willamette Valley District and all but the Rome Beauty were reported in the Hood River and Rogue River Valley districts. The Spitzenburg and the Ortley were not reported in the Milton-Freewater district and these two varieties and the Winesap were not reported in the Grande Ronde Valley district. The Yellow Newtown and the Esopus Spitzenburg were the only two varieties reported in the Mosier Valley district, and these two varieties and the Ortley, Rome Beauty, and Winter Banana were the five varieties reported in The Dalles district.

† Reported as "Face and Fill" or "Orchard run" with sizes not given.

‡ Less than one-half of one percent.

These eight varieties made up from 78 to 100 percent of the apples studied in each district. All eight of the varieties were not reported in each district. The Milton-Freewater district had the largest percentage of apples of the larger size group (66 percent), and the Rogue River and the Hood River Valley districts were next, with 46 and 44 percent respectively. The Grand Ronde Valley was notably low in large-size apples, only 5 percent of the boxes having 125 or less apples. The reason for this was that 66 percent of the apples were not reported by size, but were classified as "Orchard run."

DESTINATION OF OREGON APPLES

Of the apples included in the study for 1922-1925, 29 percent were sent to export markets, 31.7 percent were absorbed in the Pacific Coast states, 20.1 percent were sold to the Middle Atlantic states, and the remaining 19.2 percent were shipped to cities in all other geographic regions of the United States (Table XV).

TABLE XV. DESTINATION OF CAR-LOT SHIPMENTS OF OREGON APPLES, 1922-23.

Destination	Quantity for which destination was reported				Total 1922-25	Per-centage of total shown for 1922-25
	1922	1923	1924	1925		
Geographical division*	<i>cars</i>	<i>cars</i>	<i>cars</i>	<i>cars</i>	<i>cars</i>	%
New England .....	52	26	3	.....	81	1.1
Middle Atlantic .....	389	515	82	493	1,479	20.1
East North Central .....	68	72	203	138	481	6.5
West North Central .....	26	12	55	63	156	2.1
South Atlantic .....	126	115	148	51	440	6.0
East South Central .....	23	9	28	19	79	1.1
West South Central .....	44	18	32	21	115	1.6
Mountain .....	4	3	24	30	61	.8
Pacific .....	465	712	730	422	2,329	31.7
Exports .....	329	363	837	599	2,128	29.0
Total .....	1,526	1,845	2,124	1,836	7,349	100.0

\* The states included in the geographical divisions are as follows: New England—Connecticut and Massachusetts. Middle Atlantic—New York, New Jersey, and Pennsylvania. East North Central—Ohio, Indiana, Illinois, Michigan, and Wisconsin. West North Central—Minnesota, Iowa, Missouri, North Dakota, South Dakota, Nebraska, and Kansas. South Atlantic—Maryland, District of Columbia, Virginia, West Virginia, North Carolina, South Carolina, Georgia, and Florida. East South Central—Kentucky, Tennessee, Alabama, and Mississippi. West South Central—Arkansas, Louisiana, Oklahoma, and Texas. Mountain—Montana, Idaho, Wyoming, Colorado, Arizona, and Utah. Pacific—Washington, Oregon, and California.

The destination of 62 percent (5,550,000 boxes) of the total boxes of apples included in the study was reported for four years only, 1922-1925.

The leading varieties exported were Yellow Newtown (70 percent of total exported), Esopus Spitzenburg (12 percent), Ortley, Jonathan, Arkansas Black, and Delicious (Table XVI).

TABLE XVI. DESTINATION OF CAR-LOT SHIPMENTS OF OREGON APPLES, BY VARIETY.

(Quantity for which destination was reported in 1922-25)

Destination	Quantity of apples of nine major varieties								
	Yellow Newtown	Esopus Spitzenburg	Ortley	Jonathan	Arkansas Black	Rome Beauty	Delicious	Winter Banana	Winesap
Geographical division*	<i>cars</i>	<i>cars</i>	<i>cars</i>	<i>cars</i>	<i>cars</i>	<i>cars</i>	<i>cars</i>	<i>cars</i>	<i>cars</i>
New England .....	69	8	2	.....	.....	.....	.....	.....	.....
Middle Atlantic ....	886	199	148	36	7	39	21	72	22
East North Central	257	76	45	15	4	34	24	1	3
West North Central	9	63	7	14	6	32	7	1	7
South Atlantic ....	165	167	48	5	19	10	5	6	3
East South Atlantic	31	11	3	.....	14	5	4	7	2
West South Central	30	15	22	6	4	.....	15	.....	7
Mountain .....	32	11	2	2	.....	7	.....	.....	4
Pacific .....	1,115	858	36	86	72	47	6	26	21
Exports .....	1,465	349	76	63	62	7	46	14	15
Total .....	4,059	1,757	389	227	188	181	128	127	84

\* See footnote to Table XV for the states included in each division.

Although the Yellow Newtown was distributed to all parts of the country, yet the Middle Atlantic, the Pacific Coast states, and European countries were the main receivers of this variety. The Esopus Spitzenburg was heavily taken by the Pacific Coast states and European countries. All important varieties were taken to some extent in practically all sections of the United States.

SUMMARY OF PRICE TABLES

A summary of apple prices by variety, grade, and year, and of the five-year weighted average price of all apples included in the study, is presented in Table XVII.

Table XVIII presents detailed prices of apples by grade, size, and year for each of seven important varieties studied.

TABLE XVII. SUMMARY OF APPLE PRICES RECEIVED BY OREGON GROWERS, BY VARIETY AND GRADE.\*

Variety and year	Grades of apples and prices received					Total quantity (boxes)	Weighted average price
	Extra Fancy	Fancy	Choice	Combina- tion	Orchard run		
<b>Yellow Newtowns</b>							
1922 .....	\$1.07	\$0.82	\$0.54	\$0.90	\$1.00	759,183	\$0.92
1923 .....	.94	.74	.47	.58	.60	909,366	.79
1924 .....	1.75	1.46	1.15	1.07	.....	1,063,341	1.54
1925 .....	1.58	1.21	.99	1.10	.....	847,454	1.27
1926 .....	1.15	.83	.48	.....	.....	1,354,168	.87
Average .....	\$1.28	\$1.00	\$0.78	\$0.70	\$0.69	4,933,512	\$1.07
<b>Esopus Spitzenburg</b>							
1922 .....	\$1.03	\$0.74	\$0.45	\$0.41	\$ .....	373,350	\$0.77
1923 .....	1.01	.76	.49	.60	.32	421,018	.76
1924 .....	1.52	1.25	.92	1.20	.....	559,052	1.33
1925 .....	1.43	1.33	.91	.....	.....	228,743	1.22
1926 .....	.95	.54	.32	.70	.45	672,722	.64
Average .....	\$1.19	\$0.85	\$0.58	\$0.66	\$0.37	2,254,885	\$0.92
<b>Ortley</b>							
1922 .....	\$0.94	\$0.71	\$0.58	\$0.76	\$ .....	86,148	\$0.82
1923 .....	.90	.67	.41	.....	.....	84,099	.75
1924 .....	1.55	1.24	.97	.....	.....	139,799	1.38
1925 .....	1.60	1.31	1.06	.....	.....	61,514	1.42
1926 .....	1.07	.71	.46	.....	.....	161,216	.80
Average .....	\$1.23	\$0.88	\$0.69	\$0.76	\$ .....	532,776	\$1.02
<b>Jonathan</b>							
1922 .....	\$0.70	\$0.48	\$0.33	\$0.73	\$0.17	54,021	\$0.58
1923 .....	.90	.68	.38	.55	.19	77,628	.63
1924 .....	.64	1.11	.84	1.00	.....	47,670	.88
1925 .....	1.24	1.02	.69	1.09	.79	73,001	1.00
1926 .....	.81	.62	.35	.76	.52	94,706	.71
Average .....	\$0.87	\$0.78	\$0.48	\$0.79	\$0.64	347,026	\$0.75
<b>Rome Beauty</b>							
1922 .....	\$0.83	\$0.60	\$0.48	\$0.55	\$ .....	17,009	\$0.62
1923 .....	.74	.54	.50	.....	.....	64,602	.55
1924 .....	1.50	1.25	.90	.....	.....	11,094	1.16
1925 .....	1.18	1.18	.87	.65	.71	130,990	.94
1926 .....	.79	.71	.57	.57	.38	109,382	.65
Average .....	\$0.89	\$0.82	\$0.67	\$0.61	\$0.64	333,077	\$0.76

\* Weighted average price to growers for all sizes packed and delivered at shipping points.

TABLE XVII—Continued

Variety and year	Grades of apples and prices received					Total quantity (boxes)	Weighted average price
	Extra Fancy	Fancy	Choice	Combina- tion	Orchard run		
<b>Arkansas Black</b>							
1922 .....	\$1.14	\$0.90	\$0.63	\$ .....	\$ .....	43,798	\$1.02
1923 .....	.97	.70	.44	.....	.73	39,461	.77
1924 .....	1.91	1.47	1.18	.....	.....	63,518	1.75
1925 .....	1.16	1.12	.78	.....	.....	48,204	1.09
1926 .....	.90	.76	.52	.23	.....	74,016	.80
Average .....	\$1.30	\$0.95	\$0.68	\$0.23	\$0.73	268,997	\$1.11
<b>Delicious</b>							
1922 .....	\$1.32	\$1.04	\$0.84	\$ .....	\$ .....	34,102	\$1.16
1923 .....	1.35	1.12	.79	.....	.....	35,779	1.12
1924 .....	2.57	1.78	1.30	.....	.....	39,397	2.24
1925 .....	1.65	1.29	1.12	1.58	.....	51,409	1.26
1926 .....	1.21	.93	.74	1.69	.....	72,539	1.14
Average .....	\$1.63	\$1.20	\$0.93	\$1.61	\$ .....	233,226	\$1.39
<b>Winesap</b>							
1922 .....	\$1.05	\$0.87	\$0.61	\$0.71	\$1.00	7,333	\$0.93
1923 .....	.92	.68	.58	.....	.....	29,202	.75
1924 .....	1.51	1.26	.92	.....	.....	6,669	1.40
1925 .....	1.36	1.26	.99	1.45	1.21	68,771	1.22
1926 .....	.86	.86	.73	.....	.....	82,692	.85
Average .....	\$1.00	\$1.03	\$0.82	\$1.44	\$1.19	194,667	\$0.99
<b>Winter Banana</b>							
1922 .....	\$0.92	\$0.62	\$0.40	\$ .....	\$ .....	32,905	\$0.65
1923 .....	.92	.62	.33	1.44	.95	23,287	.65
1924 .....	1.80	1.26	.80	.....	.....	38,357	1.37
1925 .....	1.71	1.10	.84	1.05	1.21	28,339	1.25
1926 .....	1.26	.66	.40	.81	.49	60,818	.80
Average .....	\$1.35	\$0.85	\$0.50	\$1.12	\$0.90	183,706	\$0.95
<b>Gravenstein</b>							
1922 .....	\$ .....	\$0.41	\$0.38	\$0.79	\$ .....	12,511	\$0.63
1923 .....	.85	.....	.89	1.23	.04	14,745	.96
1924 .....	.....	1.23	1.11	1.66	.....	13,743	1.46
1925 .....	.....	1.17	.69	1.50	.....	12,343	1.36
1926 .....	.....	.30	.81	1.33	.....	37,651	1.23
Average .....	\$0.85	\$0.71	\$0.80	\$1.33	\$0.04	90,993	\$1.16
<b>Arkansas (Black Twig)</b>							
1922 .....	\$ .....	\$ .....	\$0.25	\$0.25	\$ .....	14,752	\$0.25
1923 .....	.....	.....	.25	.25	.....	12,898	.25
1924 .....	.....	.....	.97	1.25	.....	13,210	1.18
1925 .....	.....	.....	.59	.78	.....	11,339	.71
1926 .....	.....	.....	.12	.34	.....	7,074	.33
Average .....	\$ .....	\$ .....	\$0.46	\$0.60	\$ .....	59,273	\$0.55

TABLE XVII—Continued

Variety and year	Grades of apples and prices received					Total quantity (boxes)	Weighted average price
	Extra Fancy	Fancy	Choice	Combina- tion	Orchard run		
<b>Grimes Golden</b>							
1922 .....	\$0.94	\$0.58	\$0.52	\$0.01	\$ .....	7,226	\$0.58
1923 .....	.45	.04	.50	.58	.57	5,469	.41
1924 .....	1.22	.84	.50	.....	.....	3,506	1.00
1925 .....	1.50	1.01	.53	.96	.....	3,654	1.03
1926 .....	.....	.60	.51	.32	.....	9,529	.47
Average .....	\$0.84	\$0.66	\$0.52	\$0.31	\$0.57	29,384	\$0.62
<b>Red Cheek</b>							
1922 .....	\$0.83	\$0.57	\$0.35	\$0.51	\$ .....	4,687	\$0.55
1923 .....	1.04	.82	.52	.....	.....	6,524	.70
1924 .....	1.52	1.33	1.13	.....	.....	4,744	1.31
1925 .....	1.27	.75	.40	.....	.....	6,529	.78
1926 .....	1.01	.67	.22	.....	.....	5,520	.68
Average .....	\$1.12	\$0.82	\$0.55	\$0.51	\$ .....	28,004	\$0.79
<b>Hyde King</b>							
1922 .....	\$0.83	\$0.63	\$0.42	\$ .....	\$ .....	4,755	\$0.63
1923 .....	.95	.69	.45	.....	.....	7,853	.63
1924 .....	1.55	1.30	1.05	.....	.....	3,152	1.31
1925 .....	.88	.69	.44	.....	.....	9,985	.70
1926 .....	1.05	.....	.....	.....	.....	1,368	1.05
Average .....	\$1.01	\$0.75	\$0.50	\$ .....	\$ .....	27,023	\$0.76
<b>Tompkins King</b>							
1922 .....	\$ .....	\$0.62	\$0.33	\$ .....	\$ .....	3,333	\$0.47
1923 .....	.....	.76	.49	.....	.....	2,933	.64
1924 .....	1.44	1.18	1.02	1.58	.....	7,490	1.28
1925 .....	1.16	.89	.72	.....	.....	4,468	.82
1926 .....	1.16	.75	.41	.72	.....	8,633	.72
Average .....	\$1.30	\$0.88	\$0.61	\$1.00	\$ .....	26,857	\$0.85
<b>Wagener</b>							
1922 .....	\$0.34	\$0.21	\$0.53	\$0.53	\$0.09	4,899	\$0.41
1923 .....	.41	.....	.....	.....	.07	5,492	.16
1924 .....	.85	.11	.04	.....	.....	2,268	.31
1925 .....	.....	.....	.24	.72	.....	2,307	.58
1926 .....	.....	.....	.....	.....	.....	.....	.....
Average .....	\$0.51	\$0.17	\$0.15	\$0.60	\$0.075	14,966	\$0.33
<b>Northern Spy</b>							
1922 .....	\$ .....	\$ .....	\$ .....	\$ .....	\$ .....	.....	\$ .....
1923 .....	.37	.....	.11	.....	.....	2,268	.28
1924 .....	.....	.....	.76	.82	.....	3,024	.80
1925 .....	1.00	.....	.....	.....	.....	2,268	1.00
1926 .....	.68	.58	.09	.....	.....	3,780	.49
Average .....	\$0.74	\$0.58	\$0.32	\$0.82	\$ .....	11,340	\$0.63
<b>Miscellaneous varieties</b>							
1922 .....	\$0.71	\$0.70	\$0.76	\$ .....	\$ .....	2,590	\$0.74
1923 .....	.....	.52	.12	.....	.....	2,268	.39
1924 .....	.....	.....	.....	.....	.....	.....	.....
1925 .....	.....	.31	.36	.30	.23	26,082	.27
1926 .....	.....	.....	.68	.54	.43	6,467	.46
Average .....	\$0.71	\$0.41	\$0.48	\$0.33	\$0.29	37,407	\$0.35

TABLE XVIII. PRICES TO GROWERS OF APPLES, BY GRADE, FOR EACH OF SEVEN IMPORTANT VARIETIES, BY YEARS.

Variety and year	Grade, number of apples per box and prices								
	Extra fancy			Fancy			Choice		
	125 or less	138 to 163	175 or more	125 or less	138 to 163	175 or more	125 or less	138 to 163	175 or more
<b>Yellow</b>									
Newtown									
1922 .....	\$1.16	\$1.03	\$1.01	\$0.91	\$0.77	\$0.76	\$0.64	\$0.48	\$0.48
1923 .....	.95	.99	.88	.72	.75	.76	.47	.49	.42
1924 .....	1.87	1.75	1.66	1.59	1.44	1.38	1.28	1.14	1.06
1925 .....	1.65	1.64	1.45	1.27	1.26	1.11	1.00	1.05	.98
1926 .....	1.03	1.24	1.15	.66	.94	.88	.39	.54	.54
<b>Esopus</b>									
Spitzenburg									
1922 .....	1.20	.96	.77	.89	.66	.29	.60	.39	.25
1923 .....	1.02	.99	.91	.77	.73	.66	.51	.49	.39
1924 .....	1.68	1.55	1.19	1.42	1.29	.92	1.13	.95	.66
1925 .....	1.82	1.54	1.16	1.50	1.29	.93	.....	.99	.80
1926 .....	.99	.91	.72	.60	.48	.38	.37	.28	.15
<b>Ortley</b>									
1922 .....	.98	.78	.63	.78	.54	.44	.70	.29	.....
1923 .....	.92	.94	.79	.68	.67	.64	.41	.42	.34
1924 .....	1.64	1.49	1.40	1.34	1.19	1.10	1.04	.92	.87
1925 .....	1.68	1.51	1.47	1.36	1.21	1.17	1.08	.92	.94
1926 .....	1.11	1.14	.77	.70	.75	.63	.47	.47	.42
<b>Jonathan</b>									
1922 .....	1.01	.70	.54	.76	.47	.32	.53	.33	.18
1923 .....	.92	.95	.84	.71	.72	.67	.46	.37	.33
1924 .....	1.49	.65	.91	1.28	1.18	.99	1.00	.96	.71
1925 .....	1.35	1.28	1.17	1.21	1.01	.98	.75	.66	.70
1926 .....	.86	.88	.69	.76	.64	.53	.59	.35	.43
<b>Delicious</b>									
1922 .....	1.45	1.15	.81	1.22	.90	.56	1.02	.66	.33
1923 .....	1.45	1.20	1.05	1.21	1.00	.91	.88	.60	.53
1924 .....	3.00	2.51	1.78	2.21	1.76	1.20	1.69	1.36	.71
1925 .....	2.01	1.80	1.34	1.60	1.48	.90	1.36	.92	.59
1926 .....	1.60	1.22	.57	1.29	.77	.42	.92	.47	.35
<b>Winesap</b>									
1922 .....	1.06	1.04	1.06	1.00	.75	.80	.76	.49	.56
1923 .....	.94	.91	.70	.69	.91	.50	.60	.....	.50
1924 .....	1.88	1.68	1.43	1.63	1.43	1.16	1.20	1.10	.83
1925 .....	1.45	1.38	1.03	1.42	.67	1.08	1.09	.92	.89
1926 .....	.72	1.02	1.16	.87	.81	.86	.77	.74	.50
<b>Winter Banana</b>									
1922 .....	.98	.69	.42	.68	.45	.29	.44	.30	.19
1923 .....	.98	.55	.30	.69	.34	.89	.46	.07	.28
1924 .....	1.93	1.63	1.25	1.42	1.12	.87	.93	.73	.52
1925 .....	1.97	1.62	1.03	1.23	.96	.75	.92	.74	.42
1926 .....	1.29	1.23	.68	.68	.63	.58	.40	.23	.32