Users place high value on federal-state market news

James H. Cothern

he California Federal-State Market News Service is a cooperative agency, with USDA and the California Department of Food and Agriculture contributing. Its primary responsibility is collecting and disseminating current information regarding prices, movement. and volume of most agricultural commodities produced in California. This information is made available without charge through mailed reports, direct telephone query or answering units, radio reports, articles in newspapers and trade journals, and through commercial wire services. There are 13 state offices involved in gathering, processing, analyzing and disseminating this information.

More than 40,000 firms or individuals subscribe to the reports available through the mails. The mailing list includes producers, processors and handlers, educators and researchers, financiers and lenders, and wholesalers and retailers.

To determine the effectiveness of this service, the Federal-State Market News Service surveyed subscribers by mail with the cooperation of the University of California, Davis. Of the more than 19.000 surveys returned, about 15.000 were usable. The survey was conducted over a period of about four months, early in 1977.

The commodity groups were separated into six major categories for analysis: field crops, fruits and vegetables, livestock, dairy and other products. A report encompassing the sample population as a whole was also developed and analyzed.

The format of the survey included questions concerning subscriber occupations, incomes, and uses of market news. as well as the usefulness of the various forms of publications and services. Those in the population were also asked to estimate the dollar value of the service in relation to other similar sorts of market news service programs.

Occupations of users

Approximately 42 percent of those responding indicated that agricultural production was their primary or major occupation. Another 13.5 percent listed themselves as producers, but did not list a primary or secondary emphasis. About 28 percent of those responding were involved in private agricultural businesses. Another 15.5 percent were in education, research, government, or other occupations. Livestock producers were the largest single category of agricultural operators reporting, with about 2,000 individuals responding to the survey (nearly 13.8 percent). Financiers made up the largest single business enterprise with 695, or 4.8 percent, of the survey respondents in this category, followed closely by dealers and brokers with 4.5 percent of the total. An unclassified category falling outside of education, research or government accounted for 6.1 percent of the total of those responding to the survey.

Use

All sources of public information were highly preferred to other sources of market news information. Of those responding, 72 percent indicated that mailed reports were much more useful than any other form of market news. Telephone information offices or answering units were the next most preferred type of service, with 37.5 percent of those responding believing this to be the most useful. In another question, 95 percent of the survey respondents indicated that mailed reports were their first choice of a method of receiving market news. However, bias can be expected from this type of question since mail subscribers were the ones polled.

Another survey question presented six different uses which subscribers were asked to rank as first, second, and third choices for usefulness in their particular industry. Nearly 43 percent ranked Market News' principal use as a basis for buying, followed by 31 percent who used it principally for following trends in market prices. Another 11 percent of respondents used Market News as a basis for buying, but did not indicate a preferential rank.

Dollar value estimates

To determine the aggregate annual value of Market News, subscribers were asked to rank the service by annual dollar value using eight price ranges. Of those responding in the survey, 34.6 percent considered that Market News was worth \$50 or more per year.

According to income, the largest single category of subscribers (35 percent) received gross agricultural incomes of more than \$200,000 per year. Nearly 26 percent of those with gross agricultural incomes under \$20,000 valued Market News at more than \$50 per year. On the other hand, 45 percent of those with gross agricultural incomes of \$200,000 or more per year believed Federal-State Market News information was worth more than \$50 per year. Thus value inereased with income level.

Of the livestock producers subscribing to Federal-State Market News reports, 41 percent had gross agricultural incomes under \$20,000 per year. This is not surprising since over 13,000 producers in California have less than 100 animals. There were some indications from the survev that several small businessmen also subscribe to Federal-State Market News. About 17.3 percent of the retailers, or 64 of those reporting, indicated that their annual sales were under \$20,000. On the other hand, nearly 32 percent of those reporting in the retail category had gross agricultural incomes of over \$200,000. Of the packer-shippers reporting, nearly 75 percent had gross agricultural incomes of over \$200,000.

Uses by occupation

The use of Federal-State Market News was viewed by the three aggregate occupations analyzed: (1) agricultural production; (2) business and education or research; and (3) government. Ninety-five percent of those within agriculture used Federal-State Market News as a basis for buying or pricing decisions. Another 35 percent used Federal-State Market News to follow trends.

Fifty-one percent of those in business and private industry used it to follow trends. In addition, 52 percent of those in education, research, and government used Federal-State Market News to follow trends.

Seventy-five percent of all dairy producers used Federal-State Market News as a basis for buying or pricing decisions, as did 66 percent of the fieldcrop producers, 73 percent of the retailers, and about 68 percent of those in the buyer category employed Market News for this

Conclusions

Some reasonable conclusions seem to stem from the California Federal-State

Market News 1977 survey: (1) 42 percent of those receiving Federal-State Market News indicated that agricultural production was their primary function or occupation; (2) the largest single category of those responding (35 percent) received gross agricultural incomes greater than \$200,000 per year; (3) 24 percent of the producers in the survey received gross agricultural incomes of less than \$20,000

annually; (4) nearly 29 percent of the agricultural producers responding had gross agricultural incomes greater than \$200,000 per year; (5) 46 percent of the respondents in business and industry had gross agricultural incomes greater than \$200,000; (6) mailed reports were the most important source of market news for most respondents; (7) buying or pricing decisions were the primary use of Federal-State

Market News for about 43 percent of those in the survey, whereas the second most important use was for following market trends; (8) a relatively high number (35 percent) placed an annual value of more than \$50 on the market news they received.

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Thinning methods influence celery-stalk size

Norman C. Welch John W. Inman

S ize variability in celery at harvest time is a continuing concern to commercial growers. Direct-seeded celery fields produce only about 45 to 70 percent of their yields in the preferred size (2 to 2½ dozen stalks per carton). The remainder of the crop is in the less desirable larger and smaller sizes. The large size (1½ dozen stalks per carton) comprises from 5 to 15 percent of total yield. Small sizes may account for almost one half of the harvested crop in some cases, with considerable cost to the grower.

In the central coast area, common yields of 800 to 1200 crates per acre could be increased 100 crates or more through more accurate seeding and early thinning, producing 10 to 20 percent more mediumsized stalks. Better seed spacing, more uniform emergence, and reduced thinning shock would result in less competition among plants and uniform growth. This is based on data indicating that size variance and high percentages of small-sized stalks result from slowly emerging plants. The most rapidly emerging plants become the largest stalks in direct-seeded fields and stunt the growth of their competitors.

Procedure

The three-year study evaluated the effects of seedling age at time of thinning, thinning methods, and seedling crowding on the uniformity of stalk size at harvest. The treatments were based in part on plant size, with early thinning occurring at the one- to two-leaf stage and late thinning at the four- to five-leaf stage. Two thinning techniques were used at each stage of plant growth on hoeing, to evaluate current grower practice, and thinning with a knife, to minimize physical disturbance of the plant. Two additional treatments were based on relative plant size, with small plants being knifethinned at both the one- to two-leaf stage

and at the four- to five-leaf stage. The last treatment, examining extreme crowding, was knife-thinning at the six-ormore leaf stage when plants were becoming extremely crowded.

Each plot was 20 feet long; the plants were thinned to six inches apart on a 42inch double-row bed. The celery variety, 'Florida 659,' was used in all three experiments. In each experiment there were five replications.

In the first year's trials, "raw" seed (uncoated) was planted at 1/3 pound per acre; two subsequent years' experiments used coated seeds planted 0.9 inches apart. Both of these planting methods have been common in the industry, although the use of coated seeds and precision planting has recently become widespread.

Plots were on soil with clay loam texture of the Watsonville series. Two experiments were conducted in Paiaro Valley and the third in the Salinas Valley. Three irrigations were required to germinate celery in all three fields. Stalks were cut by hand and graded according to weight and size to fit market standards.

Results

Crowding was the most important factor in reducing total yield and uniformity of stalk size at harvest (see table). Early thinning, regardless of method, resulted in the most uniform sizes at harvest and highest yield in weight. Hoethinning delayed growth, and actual stunting became increasingly severe the older the plants were when thinned. In raw-seeded plots, yields of early hoe treatments were significantly below those of knife-thinned treatments. However, the precision-planted, coated-seed trials showed a significant difference between knife-thinning and hoe-thinning at the 5 percent level in weight yield, but not significant in yield of 2- to 21/2-dozen-size stocks. Later emerging or weak-growing seedlings caused considerable yield reduction. Additional growing time to allow plants to size would not have been feasible because quality was declining from increasing pithiness in the celery petioles. Extreme crowding resulted in the greatest spread of sizes at harvest time. Larger, more vigorous plants tended to compete with small plants.

Several things growers can do to produce a more uniform crop include level bed preparation and planting so seeds are at the same level and correct depth in the soil. Precision planting at .9 inches between seeds reduces seedling competition and facilitates thinning. This may help reduce thinning shock by reducing plant disturbance.

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Treatment	Celery yield lb/100 stalks			2 & 21/2 dozen sizes (percent)		
	1974	1976	1977	1974	1976	1977
Knife-thinned, 1-2 leaves	268.2a*	209.1a	246.3a	87a	95a	86a
Hoe-thinned, 1-2 leaves	246.6b	198.5a	235.4a	70b	91a	82a
Knife-thinned, 3-4 leaves	233.6c	184.9b	189.9b	55c	70b	71b
Hoe-thinned, 3-4 leaves	203.0d	152.7d	166.7c	50c	58cd	60c
Small plants selected—early	209.0d	166.9c	162.3c	50c	63c	62c
Small plants selected—late	144.4f	157.2d	154.1c	30d	55d	42d
Extreme crowding	163.2e	147.5d	125.7d	25d	48e	24c