

Sources of Information for Farmers

Current outlets and demands may lessen the reliance on individual county agents for technical information

WIN M. LAWSON
and
HOWARD M. DAIL

A number of questions are being raised about how the farmer can best be provided with technical agricultural information. Such questions concern the appropriate roles for Extension personnel and representatives of agricultural-related industry and business. A number of studies provide insight as to where the farmer gets his information. These studies are summarized and implications for Extension suggested in this article.

FARMERS depend on sources other than the Cooperative Extension Service and other educational agencies to provide them with information. One of these is the commercial representative. Just how important is the role of the commercial dealer and fieldman in communicating information? At what stages of learning is he most effective? Can he serve as a wholesaler of Cooperative Extension information or should he be looked on as a competitor? Have Extension workers made full use of commercial people in their teaching programs? These and other questions occur to Extension staff members when they plan and carry out their educational programs. Evidence bearing on these questions is summarized in this article.

The number of commercial representatives has grown greatly in such fields as insecticides, herbicides, laborsaving equipment, and testing laboratories. They often sell both products and services. In one California county, staff members estimated that there were some 100 commercial salesmen and fieldmen contacting the 2400 cotton growers in that county. One farm advisor had the responsibility of working on cotton problems with this same group of grow-

WIN M. LAWSON is Assistant Director and HOWARD M. DAIL is Communication Specialist, Agricultural Extension Service, University of California, Berkeley, California.

ers. In one of the state's most productive counties, a thousand service representatives and consultants and 85 credit institution staff members were giving advice to farmers.

Several studies have indicated the role of the commercial dealer in communicating information to farmers. A Georgia study¹ showed that 37.5 per cent of the respondent farmers receive information from fertilizer dealers; 57.6 per cent, from farm magazines; and 25.2 per cent, from agricultural workers. However, when asked what was the most reliable source of information, 13.5 per cent indicated Extension, while fewer than 2 per cent said the fertilizer dealer was the most reliable source.

In a study of farmers' attitudes toward use of fertilizers in the western states,² farmers using commercial fertilizer on selected crops were asked with whom they had talked over fertilizer needs the last time they bought fertilizer. Thirty-five per cent stated that they had discussed this with the local dealer; 15 per cent, with neighbors, friends, or other farmers; and 13 per cent, with a county agent. As to the source giving them the best information on fertilizers, the county agent headed the list, followed by agricultural college publications, neighbors, local farm magazines, and local dealers.³

In a study in northern California,⁴ farmers were asked to give their major source of information on fertilizer usage on a multiple choice basis. Some 80 per cent listed fertilizer fieldmen and salesmen; 40 per cent, farm advisors; 29 per cent, neighbors; and 26 per cent, farm magazines.

A 1959 study of 349 cotton growers in California⁵ showed that 80 per cent of them relied on commercial representatives as their first source of information for insect problems, while only 15 per cent would call the farm advisor for an insect problem. Table 1 shows the first source of information for four kinds of problems.

But influence from commercial sources is not limited to fertilizer dealers. In an Iowa study of adoption of two farm practices (use of

¹Roger C. Woodworth, *Farmers' Attitudes, Knowledge and Use of Fertilizer*, Bulletin N. S. 81 (Athens: Georgia Agricultural Experiment Stations, March, 1961), p. 21.

²National Analysts, Inc., *A Study of Farmers' Attitudes toward the Use of Fertilizer*, tables for Western Region (Washington: National Plant Food Institute, Fall, 1957), Table 85.

³*Ibid.*, Table 156.

⁴O. E. Thompson, L. P. Donker, and D. D. Kleist, *How Fertilizer Dealers Affect Fertilizer Use*, unnumbered publication (Berkeley: University of California, November, 1959), p. 14.

⁵W. M. Lawson, "Commercial Cotton Farm Operators' Perception of the California Agricultural Extension Service" (unpublished Ph.D. dissertation, University of Wisconsin, Madison, Wisconsin, 1959), p. 199.

2,4-D spray for field weed control, and the feeding of antibiotic feed supplements to hogs) Beal and Rogers⁶ found that the importance of commercial sources increased from the awareness through the trial stage. "At the application stage, one category of sources of information was mentioned by over 40 per cent of the respondents—informal sources in the case of 2,4-D and commercial sources in the case of antibiotics. . . . Commercial sources of information were more important in the case of antibiotics at all stages in the process than in the case of 2,4-D weed spray."

A random sampling⁷ of 140 farmers in Des Moines County, Iowa, showed that local fertilizer dealers were surpassed only by farm magazines as source of fertilizer information. Third in importance was the Agricultural Extension Service. Sources of information used infrequently were neighbors, newspapers, and agricultural college specialists.

Table 1. Per cent distribution of commercial cotton farm operators according to first source of information for specific problems.

Problems	Com- mercial representa- tive	Extension Service	Cotton gin	Experi- ment station	Friend or neighbor	Other	Total
Cultural	16	33	16	4	21	10	100
Insect	80	15	2	1	1	1	100
Serious disease	67	26	3	2	1	1	100
Farm planning	18	41	3	1	20	17	100

A California study⁸ indicated that 85 per cent of fertilizer representatives who received farm advisors' newsletters always read them; 14 per cent read them sometimes. Fertilizer newsletters by fertilizer companies and those of the trade associations were always read by 78 and 73 per cent of the fertilizer representatives who received them. When fertilizer men needed help in solving specific soil fertility problems, they generally turned to individuals rather than printed material. The three most used sources of information were the farm advisor, co-worker in own company, and the specialist in own company, in that order. Very few indicated they seldom or never needed assistance in solving soil fertility problems.

⁶ George M. Beal and Everett M. Rogers, *Special Report No. 26*, Agricultural and Home Economics Experiment Station (Ames: Iowa State University, June, 1961), p. 6.

⁷ I. A. Wickner and J. C. Hodges, "Soil Facts Plus Teamwork Increase Farm Income," *National Plant Food Review*, VII (Spring, 1961).

⁸ O. E. Thompson and W. M. Lawson, *University-Fertilizer Industry Relationships*, unnumbered publication (Berkeley: University of California, 1962), p. 42.

Many test and demonstration plots are conducted by fertilizer representatives, according to the California study—some 3500 to 4000 are conducted each year. More than half are done with farmers, one-third with own company, one-seventh with farm advisors. Fewer than 4 per cent of the demonstrations are conducted directly with the Agricultural Experiment Station.

In rating the value of the various methods the University of California could use to present fertilizer information to them, the respondents gave top priority to area schools, extension courses, and meetings, in that order. Obtaining time to attend such training was no problem for most fertilizer representatives.

Here were characteristics of Iowa dealers who were selling a large volume of fertilizer and possessing a favorable attitude toward their fertilizer business. They had a high orientation toward the importance of scientific information in modern farming; they possessed a relatively high technical knowledge about fertilizer and fertilizer use; and they saw their role as being that of a trained specialist and consultant to the farmer on fertilizer matters.⁹

Another Iowa study reported that

the fertilizer dealer appears to have a greater potential for influencing the farmer to use fertilizer at more nearly optimum levels than any single fertilizer-related information source. Whether or not the dealer does influence the farmer seems to depend largely on three factors: (1) the extent to which the farmer perceives the dealer as a reliable source of information about fertilizer and fertilizer use; (2) the extent to which the dealer attempts to fulfill this role of a reliable information source; and (3) the dealer's ability—that is, his knowledge about fertilizer—to fulfill this role.¹⁰

Dealers with higher fertilizer sales volume and a leaning toward new merchandising techniques tended to depend more on relatively technical information sources, according to Beal, Bohlen, and Campbell.¹¹ Such information sources included college publications, college specialists, and technical representatives of fertilizer companies rather than fertilizer company publications or fertilizer salesmen.

Of the dealers queried, some 75 per cent indicated that they

⁹ George Beal and Joe Bohlen, "The Dealer and Fertilizer Sales," mimeo prepared in 1959 (Ames: Iowa State University), p. 6.

¹⁰ George M. Beal, Joe M. Bohlen, and Larry Campbell, "Information Sources Used by Fertilizer Dealers," a series in *Commercial Fertilizer and Plant Feed Industry*, CI (December, 1960), p. 56 (report on data from Iowa State University Experiment Station Project No. 1352 in cooperation with the Tennessee Valley Authority).

¹¹ *Ibid.*, p. 57.

would like to have additional information about fertilizer. Nineteen per cent said they would like this to be obtained from college and extension clinics; 15 per cent indicated college and USDA publications; 11 per cent, college specialists; 4 per cent, county Extension personnel; and the same percentage named fertilizer company salesmen. Three per cent indicated fertilizer manufacturers or their technical representatives.

Many of the state Extension Services cooperate with fertilizer dealers and fieldmen in various educational ways as indicated by these briefs of clipped news articles: Kansas held district fertilizer/county agent training schools. Nebraska research and Extension agronomists organized a "trace element tour" across the state. Minnesota held a series of 12 regional conferences for fertilizer, seed, and agricultural chemicals dealers. Ten New York counties hosted seed and fertilizer dealers' meetings under the sponsorship of the Agricultural Extension Service. An annual fertilizer sales clinic and a soil fertility and plant nutrition short course was held at the University of Missouri. Six Ohio counties conducted dealers' short courses, while Iowa State University held an annual fertilizer dealers' short course followed by a fertilizer industry representatives' conference. The Pacific Northwest held fertilizer industry conferences. The National Plant Food Institute assisted in most of these and in many others not mentioned.

In California, short courses and conferences are planned for dealers, fieldmen, bankers, etc., and these men also are included in the mailing lists for many of the some 380 county newsletters.

IMPLICATIONS

With the increased number of commercial persons dealing with the same farm public as the Cooperative Extension Service, Extension needs to consider seriously how it best can work with them. Because these individuals contact the individual farmer often in many ways, they can be a valuable ally in the educational programs of the Extension Service. Extension may well consider itself partly a wholesaler of information to the commercial person who in turn retails it to the consumer.

Such a role justifies considerable extra effort and research on the part of Extension to inform interested dealers, bankers, fieldmen, and others. Training meetings, short courses, tours, and the preparation of written information directed at such individuals may well be practiced in many counties. Also commercial people could be included in the regular mailing list for newsletters, publications, and reports designed primarily for the farmer. They could be invit-

ed to many of the Extension-sponsored meetings. Training of commercial representatives may well become a planned and scheduled part of Extension's programs.

The broad result may be the lessening of reliance on the individual county agent, but this practice should increase the spread of information and training among farm people. This involves a partial change of roles on the part of some county agents, from that of the individual doer to one who guides and directs a broad program of education in his area. It also means that state specialists at times will work as liaison persons with statewide commercial groups, tying together USDA, state, and county information and passing it along to the groups wanting it.

MOST OF US ARE ENGAGED in trying to get our affairs on an automatic basis. We seek the infallible investment, the bonds or stocks we can buy and forget. We want our businesses to operate smoothly while we play golf and fish.

Occasionally we seem to approximate this heavenly condition; but, if we practice our theories too stubbornly, the day always comes when we discover that our securities have shrunk to half their former value and that our business is close to insolvency.

Everything insists upon its right to change. While we sleep, inventors perfect new devices that undermine the assets back of our infallible bonds. While we fish, the women shorten their skirts and put on silk stockings, and we find the demand for our cotton goods vanishing.

The lesson that everything must change is hard for middle age to learn. After 40 we are inclined to become tired. We have encouraged change all our lives and have fought the established order. The world has heard us and has rewarded us. Now we are entrenched and are looking for peace and quiet. We close our minds and choose our companions among those who think and feel as we do.

Meantime, the gates are being stormed by men of youthful minds and ideals, some older and some younger than ourselves. What we consider good enough doesn't suit them at all.

That's why so many men who are going well at 40 are floundered at 60, just when they should be in their prime.

—WILLIAM FEATHER.

THE PERSONS who have the greatest scope of influence today are the program planners. I wonder if they know this? I doubt they do. As I study the programs of many organizations and their content, I cannot believe that those who make them know their own potential usefulness. There is no time today for the trivial, the childish, immaterial program. Every hour that people are willing to give to come to a class or a meeting ought to be most carefully used and planned to give the utmost in accurate information, presented in the most interesting way.

—PEARL S. BUCK.