

The Interaction of University Extension Specialists and Seed Company Agronomists: Results of a Questionnaire

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Public and private groups who work with agricultural producers understand that to be respected by growers and to influence their decisions, it is critical to be a relevant source of information. The private sector's focus on information transfer to farmers has increased over the past 20 years, whereas in many cases, direct contact with producers in the public sector has decreased. These trends have occurred at the same time that availability of new production technologies such as transgenic crops and precision farming has increased. It is important to understand the nature of the relationships of these two knowledge-transfer groups in terms of how their similar missions either complement or compete with one another.

A questionnaire of U.S. university extension specialists and field sales agronomists with Pioneer Hi-Bred International was developed and sent in May–June, 2004 to gain perspectives on their current and expected future interactions. The people who were queried were those whose work focused primarily on corn and soybean production. The selected university extension specialists had extension programs and strong reputations with which I was familiar. They represented several disciplines including agronomy, entomology, plant pathology, soil science, and weed science. This followed a similar questionnaire that I had used in 1995 (Carter 1995).

Of the 37 university extension specialists who were asked to participate, 22 responded. They were from Cornell University, Iowa State University, Ohio State University, Michigan State University, Purdue

University, University of Illinois, University of Nebraska, University of Minnesota, and University of Wisconsin.

University Extension Specialists: Perceptions of Seed Company Agronomists

University extension specialists were asked to respond by e-mail to these four statements:

1. Describe positive aspects of your interaction with seed company field sales agronomists.
2. Describe negative aspects of your interaction with seed company field sales agronomists.
3. Describe any changes needed for seed company agronomists to stay relevant with future clients.
4. Share comments regarding expected future roles and relationships between seed company agronomists and state university extension specialists.

These specialists were asked to respond based on their views of seed company agronomists in general and not only those from Pioneer Hi-Bred. The summary statements that follow are representative of the responses that were received from the university specialists.

Positive Aspects of Interaction with Seed Company Agronomists

- They have close contact with growers, especially those who are most progressive and motivated to achieve high yields and profitability.
- They encounter a wide diversity of crop situations and have strong problem-

solving skills in the field.

- They provide perspectives on future extension program possibilities and on the relevancy and implementation of extension recommendations.
- They multiply university information to groups not reached by traditional extension.
- They have expanded Certified Crop Advisor (CCA) certification.
- Most have a higher level of training/competence than 10 years ago.
- It is a “rewarding challenge” to work with them.

Here are some of the phrases that were used by extension specialists about the seed company agronomists:

- Valued as colleagues
- Ear-to-the-ground perspective
- Utmost respect
- Teamwork
- Symbiotic relationship when strategically developed
- Shared experiences
- Conduit of information
- Well trained
- Eager to learn

Negative Aspects of Interaction with Seed Company Agronomists

Most extension specialists volunteered that they do not have major negative issues with seed company agronomists. But some concerns were expressed:

- They sometimes use university information (graphics, articles,

photographs) without giving proper credit.

- They are protective of/biased toward their products.
- They sometimes sell a product or concept that is at odds with university research or has little research backing.
- They sometimes invoke explanations that absolve their product from blame or concoct pest treatment thresholds without supportive data.
- Some tend to take single-state university recommendations across state boundaries.
- Some friction exists at times with university testing of hybrids and varieties.
- Some are promoting glyphosate over-use; industry agronomists need understanding of long-term economic consequences and stewardship concerns.
- Many are becoming too busy to participate in extension activities.
- They do not all have the same expertise and trust level; more comfortable with some than others.

Expected Future Roles and Relationships of Seed Company Agronomists with Extension Specialists

- Agricultural companies are consolidating and universities are down-sizing; mutually beneficial ways must be developed to address this.
- There is a strong desire for closer partnerships and interaction to keep university specialists relevant and funded and to ensure that messages to growers are unified. Many university specialists would like more frequent and ongoing discussion forums (including electronic sharing of field images for diagnosis and learning) and joint educational programs. Many specialists also would like more joint applied-research opportunities with industry, including funding, ideas, and being “in the loop” with new technologies and with growers. University specialists generally believe that this can be done to the benefit of the grower without sacrificing distinctive goals of industry and university specialists.
- One respondent said that industry may meet needs of large commodity producers, and extension will concentrate on smaller, more diversified units.
- Specialists stated that a role still exists for universities in training the next generation of industry agronomists.
- A concern was expressed that, more often than in the past, recently hired university extension specialists have little or no farm background and less

capability/interest in field problem solving. The question was posed: could they learn from industry agronomists?

I conclude this section with quotes from two of the university extension specialists:

Company agronomists will serve an even greater role in the delivery of technical information. This will be required with the continued shrinking of agricultural extension field staff. While not true in all states, we in (our state) have always cherished our positive relationship with company agronomists. We do not intend to become a competitive force in the market place, but rather hope to work together to make sure the best technical information is available to the clientele....

I think there will always be some tension between the two groups because extension is charged with providing unbiased information and in this world of spin that we live in, a discussion of pros and cons is difficult without someone feeling like they have been attacked. Seed company agronomists' main objective is to support sales, and it takes a while for them to figure out how to do that without losing their credibility. I know several who are very good at it. There are some excellent models out there on how to make the relationship work to everyone's benefit and maybe we need a study of those successful models.

Pioneer Field Sales Agronomists: Perceptions of University Extension Specialists

In 1995, 26 field sales agronomists were originally queried (Carter 1995). Of these, 12 were still in the same role in 2004, and they were asked to respond again so that changes compared with the previous questionnaire could be evaluated. Ten of the 12 agronomists responded. The original agronomists were selected to represent states in which extension specialists were offered the opportunity to respond and to represent those field sales agronomists with enough experience in the position to develop impressions of the level of interaction with extension specialists. States represented by respondents included Iowa, Michigan, Minnesota, Missouri, New York, North Dakota, Ohio, Pennsylvania, South Dakota, and Wisconsin.

Changes since 1995 in Pioneer Field Sales Agronomists' Interactions and Future Expectations

Pioneer field sales agronomists were emailed a form that requested their perceptions of changes in current (compared with 1995) and expected future (by 2010) use with their clients (sales representatives and customers) of information and training received from university extension specialists. They also were asked to indicate perceived

changes in current and future joint training and research activities with university extension specialists. The form sent to field sales agronomists follows:

1. Compared to 1995, my **current** use of information and training received from university extension specialists for transfer to sales representatives and customers is
___ About the same
___ More
___ Less
2. By 2010, I expect my use of information and training received from university extension specialists for transfer to sales representatives and customers to
___ Stay about the same as now
___ Increase
___ Decrease
3. Compared with 1995, my **current** involvement in joint activities (training, research) with university extension specialists is
___ About the same
___ More
___ Less
4. By 2010, I expect my involvement in joint activities (training, research) with university specialists to
___ Stay about the same as now
___ Increase
___ Decrease

Figure 1 is a summary of 1995 field sales agronomists' responses from the previous questionnaire (Carter 1995) about the information and training they obtained from three sources for transfer to their clients. These results indicated that a major portion of the crop and soils information and training used by Pioneer field sales agronomists at that time was accessed from universities. In the follow-up questionnaire in 2004, 6 of 10 field sales agronomists indicated that this had either stayed the same or even increased, but 4 of 10 said that they were using less university extension support. By 2010, 8 of 10 of these field sales agronomists expect their use of university extension resources to stay the same as 2004 or to increase.

These field sales agronomists were divided almost equally in their perceptions of changes since 1995 in the frequency of joint training and research activities with university extension specialists; five said that there were more, and four said that there were fewer joint activities by 2004. Half of these field sales agronomists expect more joint activities in the future, but three also indicated that they expect fewer joint training or research activities with extension specialists by 2010.

Although these results include only 10

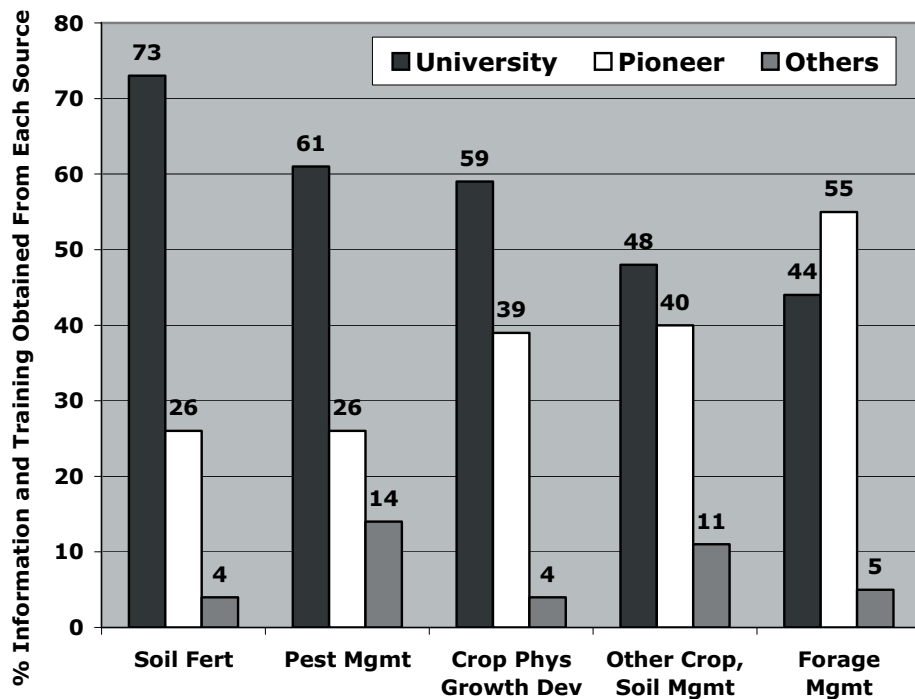


Fig. 1. Information and training obtained from three sources by Pioneer field sales agronomists for transfer to their clients (sales representatives and customers), 1995. Adapted from Carter 1995.

veteran field sales agronomists of the more than 100 Pioneer field sales agronomists in North America, based on my interaction and communication with the entire team, I believe that their perspectives are representative of the range in views of others who have been field sales agronomists for several years. University extension specialists are still an important source of information and joint activities for Pioneer field sales agronomists. Although there are apparently some variations in relationships with university extension specialists and in opinions about the value of their information, many field sales agronomists expect a high level of interaction to continue within the next few years.

These field sales agronomists also were asked to indicate their thoughts on the positive and negative aspects, changes needed, and expected future roles and relationships with university extension specialists. The following sections are summaries of their responses.

Positive Aspects of Interaction with University Extension Specialists

- They are a highly valued resource for joint training efforts with sales representatives.
 - Some are making their research farms available for this training.
 - They bring a different perspective, which can be refreshing to our sales representatives.
 - They are a source of certified crop advisor continuing educational units for

sales representatives.

— We have been able to give them a chance to get in front of more farmers.

- They have been very helpful in developing and exchanging information with us on emerging and changing pests.
- They have been good sources of information to help recruit interns and new employees.

Negative Aspects of Interaction with University Extension Specialists

Similar to extension specialists, field sales agronomists indicated that there have been few negative aspects, but they did offer some concerns.

- Some suggested that practical relevance of extension specialists is declining because of an imbalanced focus on topics such as environmental issues rather than crop management.
- They may be losing influence with the top growers.
- Some field sales agronomists perceive that university extension specialists do more than necessary to find faults with new technologies.
- There is excessive discussion about their declining budgets.

Changes needed for university extension specialists to stay relevant with future clients

- Some university extension specialists need to better understand the “marketplace”

by becoming more aware of changes in farm size and the agricultural economy in relationship to practical viability of their recommendations; for example, growers with large acreages may not be able to scout fields every 3–4 days.

- They need to spend more time with farmers learning what motivates them and where they are going with their operations.
- Some do not understand the competitive marketplace; for example, it can be very hard for industry people to share information with those from other companies, and there is pressure from marketing departments that may overrun the science.
- Their core programs need an appropriate level of funding to continue.

Expected Future Roles and Relationships of Seed Company Agronomists with Extension Specialists

Most field sales agronomists who responded are open to exploring new ways to collaborate with university extension specialists and hope that they have the support to continue as a resource in the future. There is strong interest in more communication. Here are three direct quotes that express views of three field sales agronomists:

“We are partners trying to accomplish the same goals”

“We certainly learn a lot from each other. They offer an up-to-date research perspective, while we provide intensive field experience. It’s also good for the growers to see that academia and industry work together in their best interest.”

“It is alarming to see how deeply their budgets are getting cut. They need to receive proper financing to remain a viable research source. That is where companies like Pioneer must support these programs in the future. We have relied on extension for as long as I can remember. I hope we (Pioneer) can continue to work with these universities both financially and with joint projects.”

Summary and Suggestions for University Extension Specialists and Seed Company Agronomists

From the responses of university extension specialists and Pioneer field sales agronomists to this questionnaire, it appears that it is beneficial for both entities to continue working together in a strong relationship. In summary, I offer some thoughts and suggestions for seed company agronomists and university extension specialists.

**Seed Company Agronomists:
Be Sure to Give Credit where Credit is Due.**

The primary concern expressed by extension staff with seed company information providers is the limited or lacking credit or recognition given for university sources used in industry presentations and publications. I believe there has been improvement in recent years, partly because credits are now imbedded when web-based university information is transferred via e-mail links to growers by seed company agronomists. It becomes difficult for university extension leaders to defend their relevance and funding needs to legislators when grower clients do not realize that much of the information they receive from industry originated with extension specialists.

Establish Regular Interaction Forums with University Staff.

Seed company agronomists and extension specialists benefit greatly from regular forums or discussion sessions to share ideas and observations. Seed company agronomists bring direct grower and industry perspectives, and university specialists and researchers share insights based on their scientific depth. Growers ultimately benefit from bringing these views closer together. Seed companies need to take the lead in establishing national and state forums with university staff. Seed company agronomists who do not do so now also could consider inviting extension specialists to join them on their service call "rounds" with sales representatives and growers from time to time.

Keep University Staff Informed of Your Messages in Advance.

There will be less potential for conflicts or confusion with growers if seed companies can share their messages with the university extension specialists in advance of distribution to growers. This is especially important if these messages may conflict with recommendations of university specialists. Finally, seed company agronomists need to remember that although their messages are often consistent regionally and nationally, universities usually develop state-by-state recommendations. If using results or information pieces from another state, it may be necessary to inform the appropriate extension specialist to be sure that there is not a conflict or major inconsistency.

Send Representatives to Major Extension Events.

There are more extension events than can be attended by any one seed company agronomist, but it is important that at least one company representative be present at the

major extension events to bring key messages back to the others.

**University Extension Specialists:
Be Sure You Know the Farmers.**

Those who attend extension or large group meetings may not be representative of all growers. It is important to find ways to spend time with and understand the needs of individual growers who represent a range in size and goals for the future of their operations.

Strive to Understand Industry.

Consider offering to ride with a seed company agronomist during their "service call" rounds. A few extension specialists have used their sabbaticals to spend extended time on projects with industry—and have returned to their former jobs without perceptions of being tainted by the experience. This is one of the best ways to understand how industry views agriculture from the "inside."

Leverage Data and Information across State Lines.

University extension specialists can often function as disparate and even competing entrepreneurs rather than leveraging their data and insights across locations, especially in adjoining states. There are instances where common protocols could be developed across state lines so that similar treatments can be more easily combined over environments.

Encourage Publication in Practical Journals and Participation in Meetings for Industry Agronomists.

Agronomists with seed companies find little value in most of the articles in scientific journals, and travel costs and the lack of relevant content limit their participation at annual society meetings. University extension specialists should consider more active attendance and participation in regional branch society meetings. I have attended the North Central Branch American Society of Agronomy meetings the past few years, and among the 100–200 attendees, only a handful are extension specialists from universities. Those with applied research efforts at universities should consider submitting more articles to practical on-line journals, such as the *Crop Management* e-journal.

Many university extension staff now aggressively use Web-based distribution approaches to share their field study results and information. This is greatly appreciated and widely accessed by industry agronomists. These sources of information are much more relevant and widely used than journal articles. This needs to be recognized by university administrators and department

colleagues so that extension specialists are rewarded for these efforts.

Express a Positive Image.

University extension specialists' roles have changed and will continue to do so, but they are still looked to by many clients as key sources of information. Indications are that this will continue in the future. Extension personnel need to convey a positive image and "talk up" their successes. Budget challenges are real, but over-emphasizing how bad things are to current and prospective clients can be a self-fulfilling prophecy of doom.

Reference Cited

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