Media source impacts ag biotech communication

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Communication between the public and government is a necessary component of public trust. For many modern issues, constituents trust that their legislators understand the science behind these topics and pass legislation for the betterment of society. While science has its uncertainties, much of that public trust is subsequently transferred to the scientists who inform legislators. Past studies show that scientists were seen as trustworthy sources of information; however, the public would like scientists to be more open, sharing their scientific knowledge through information sources such as mass media. For an issue as debated as agricultural biotechnology, communicating factual scientific information is a necessary ingredient in public acceptance.

Dr. Gary Wingenbach, a professor in the Department of Agricultural Leadership, Education, and Communications at Texas A&M University, collected data from 2004 to 2005 to examine current and possible future legislators' perceptions of biotechnology. Also, data collected on information sources used by respondents to learn more about agricultural biotechnology helped the authors understand the impact of media types when communicating the science of biotechnology to others. Results from this study have been published in a recent edition of the *Journal of Natural Resources and Life Sciences Education*.

Two groups selected for this descriptive study included elected state officers of the National Future Farmers of America (FFA) Organization and Texas House and Senate legislators. The National FFA provides opportunities for high school and college students to increase their

knowledge of agriculture and develop leadership skills. The group was chosen because state FFA officers have a propensity for seeking elected public offices.

Both groups relied on the Internet and newspapers as sources for agricultural biotechnology. However, Texas legislators used the Cooperative Extension Service significantly more often than did state FFA officers, whereas the FFA officers relied more on the Internet.

"We weren't surprised by the group differences in information source preferences," said Wingenbach. "State FFA Officers were 18 to 20 years old, while Texas legislators were 45 to 55 years old. Information source preference through online access only has become the norm for young audiences."

Other results showed that respondents believed it was important to continue agricultural biotechnology research on seven issues: safer food, reduction of pesticides, added nutritional value, risk compared to pesticides, benefits and/or harm to the environment, and control of released genes. Both groups thought biotechnology practices had "positive" not negative effects on the environment.

Science-based education about agricultural biotechnology through the most accessed media could produce more informed leaders. To prepare a more informed future public, other studies should assess the effects of an agricultural science curriculum on students' understanding of agricultural biotechnology and/or other agricultural topics (e.g., BSE, avian influenza, etc.) in the media. Informed understanding of current agricultural topics, such as biotechnology practices, may lead to an informed public, and to future leaders who could more readily understand the science of agricultural biotechnology.

Source: American Society of Agronomy