

eFields: Growing Farmer Engagement in On-Farm Research

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BACKGROUND

Ohio State University Extension has a long history of conducting on-farm research to provide producers with practical, science-based insights on agricultural technologies and practices. Since 2017, the OSU Extension Digital Ag Team has strengthened farmer partnerships to localize research efforts, conducting 1,434 trials across 70 Ohio counties. Each year, the team publishes a summary report, distributing an annual average of 19,000 copies nationwide and internationally.

To assess the impact of the eFields program, an evaluation process was initiated in 2024. The purpose of this evaluation was to discover several key aspects, including:

- The level of farmer knowledge about the eFields program
- The degree of engagement in on-farm research
- The value and use of research-based information by respondents
- Changes in production practices based on information derived from the eFields program.

PROGRAM STRATEGY

The eFields program engages farmers in the research process to ensure the research is relevant to their operations and responsive to emerging needs. Protocols are developed to answer farmer-driven questions using production-scale equipment while also leveraging sound experimental design to provide useful and reliable results (Figure 1). The eFields program also focuses maximizing impact through broad-reaching and diverse outreach strategies (Figure 2).

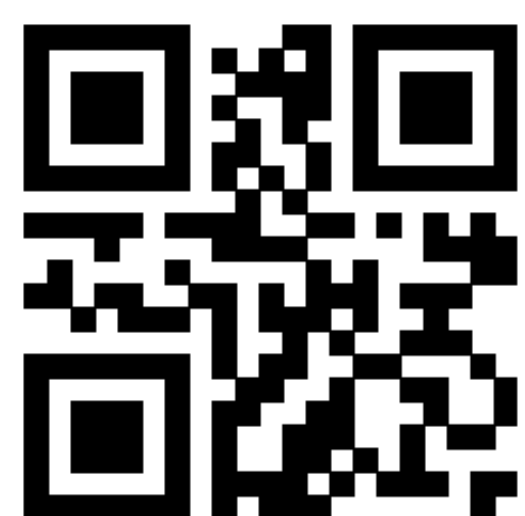


Figure 1. Examples of research activities including planter technology (top left), soil health metrics (bottom right).



Figure 2. Examples of outreach activities including the annual report (left), signage to recognize cooperating farmers, (middle), and incorporating result into Extension programming (right).

Scan here to
access the
collection of
eFields reports



PROGRAM EVALUATION

A 16 question Qualtrics survey was distributed to OSU Extension stakeholders via email and newsletter. The survey focused on the level of awareness of eFields on-farm research (Figure 3), changes in behavior past, present and future as it pertains to conducting on-farm research (Figure 4 and 5), and how e-Fields has influenced decision making on their farms (Figure 6). The recipients of the survey invitation had three weeks to respond. The survey received 465 responses; 63% farmers, 19% agriculture professionals, and 18% other professions. The average farm size represented was 1,300 acres and average number of acres consultants advised on was 33,000 acres.

IMPACTS

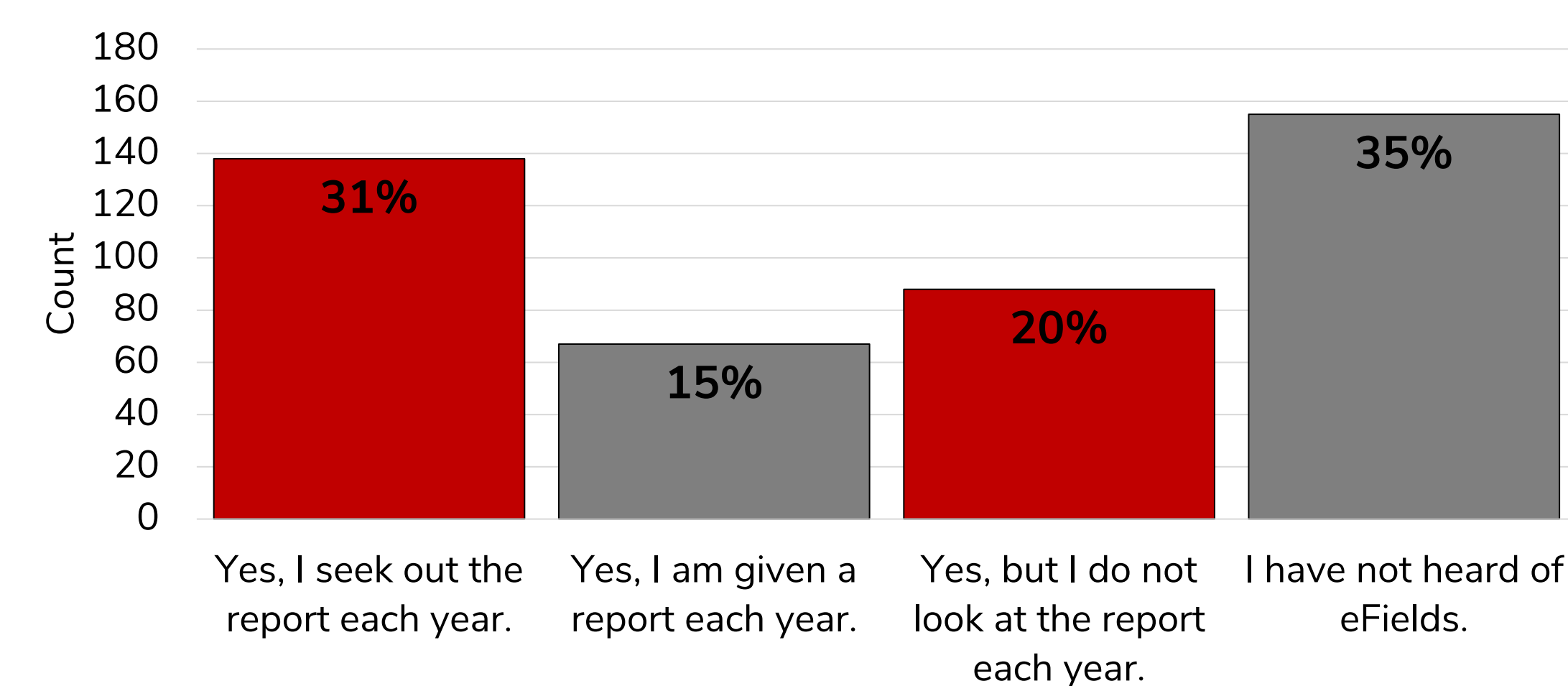


Figure 3. Distribution of survey respondents' familiarity with the eFields report.

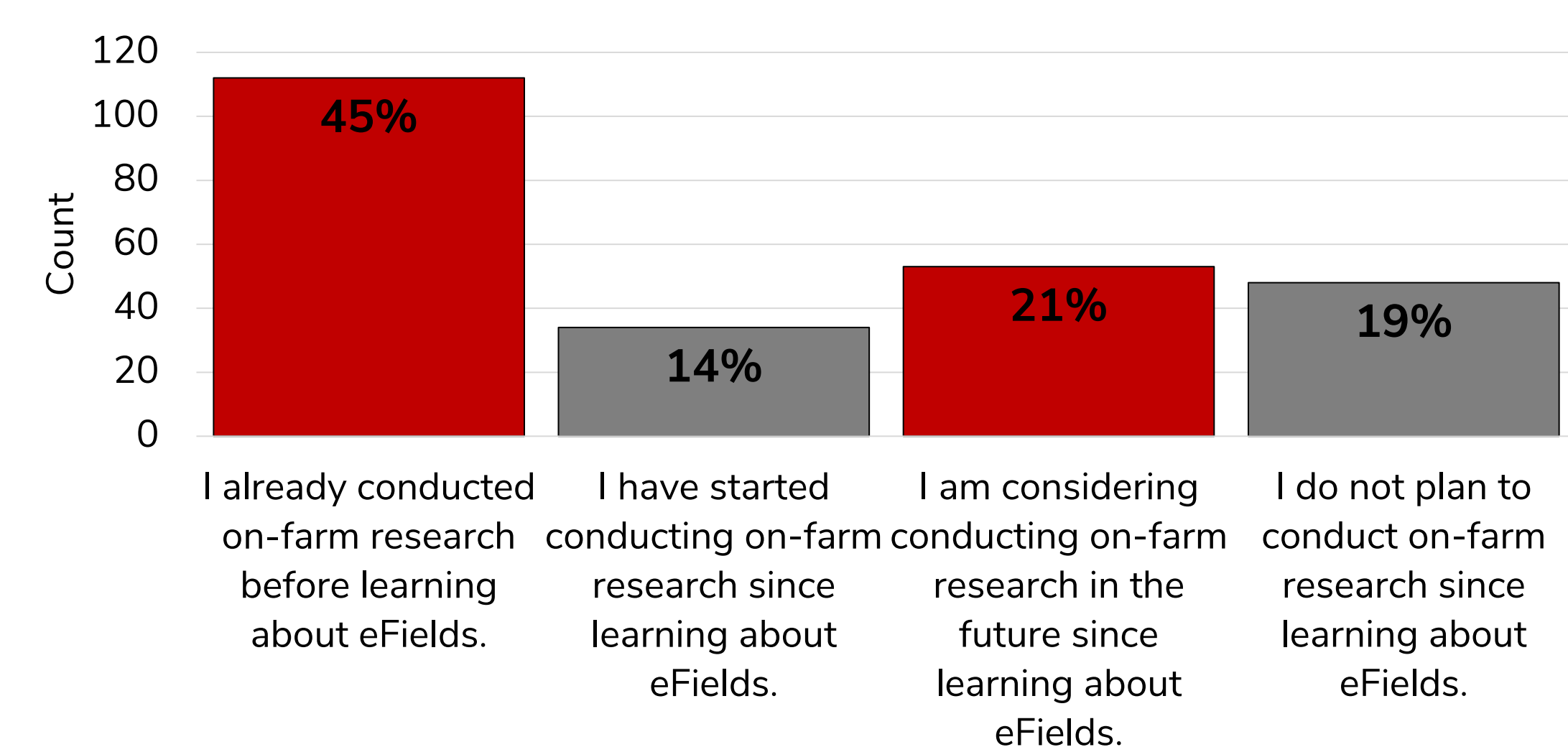


Figure 4. Distribution of survey responses to the question, "How has your experience with eFields changed your behavior regarding conducting on-farm research??"

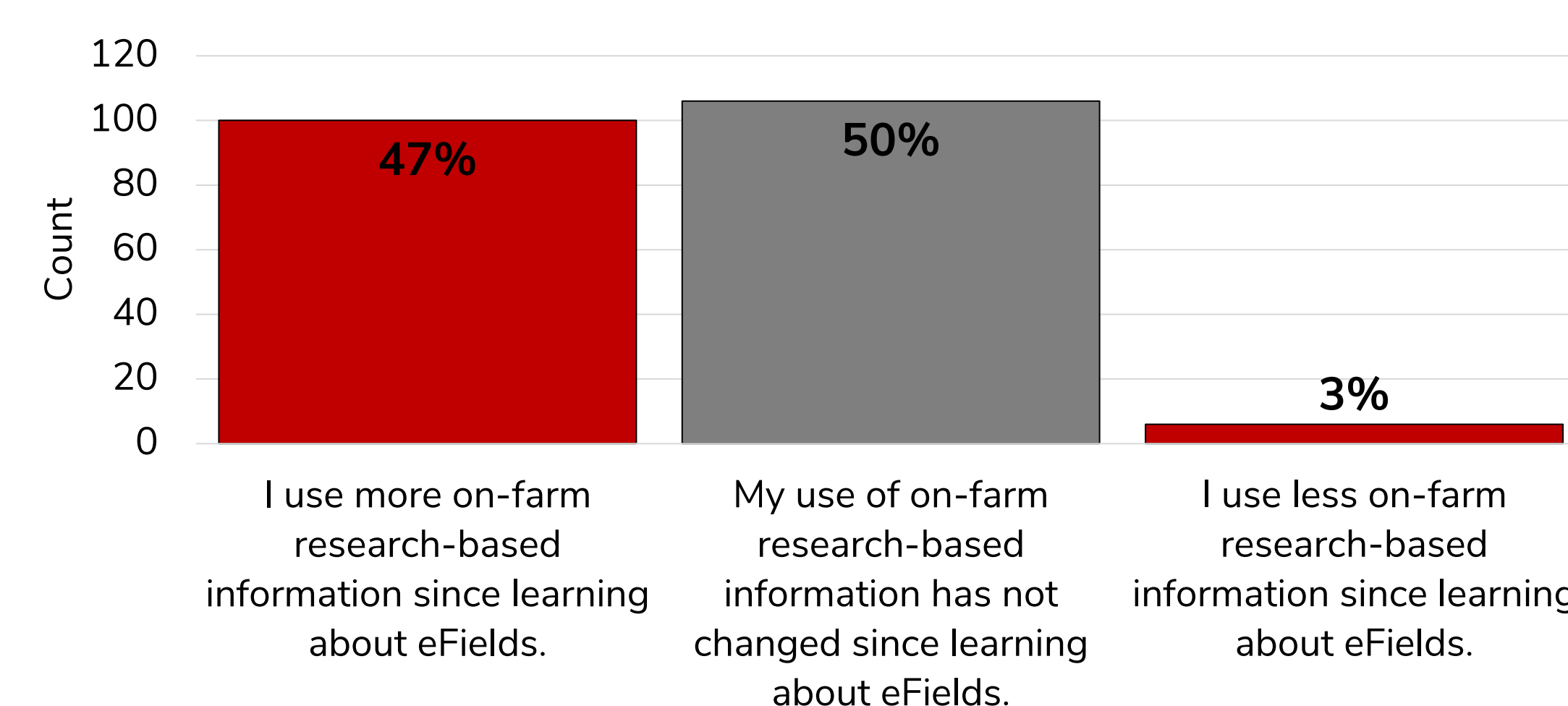


Figure 5. Distribution of survey responses to the question, "How has your experience with eFields changed your use of on-farm research-based information?"

Participation in on-farm research and the use the information created has increased because of eFields.

eFields has positively influenced decision-making on Ohio farms.

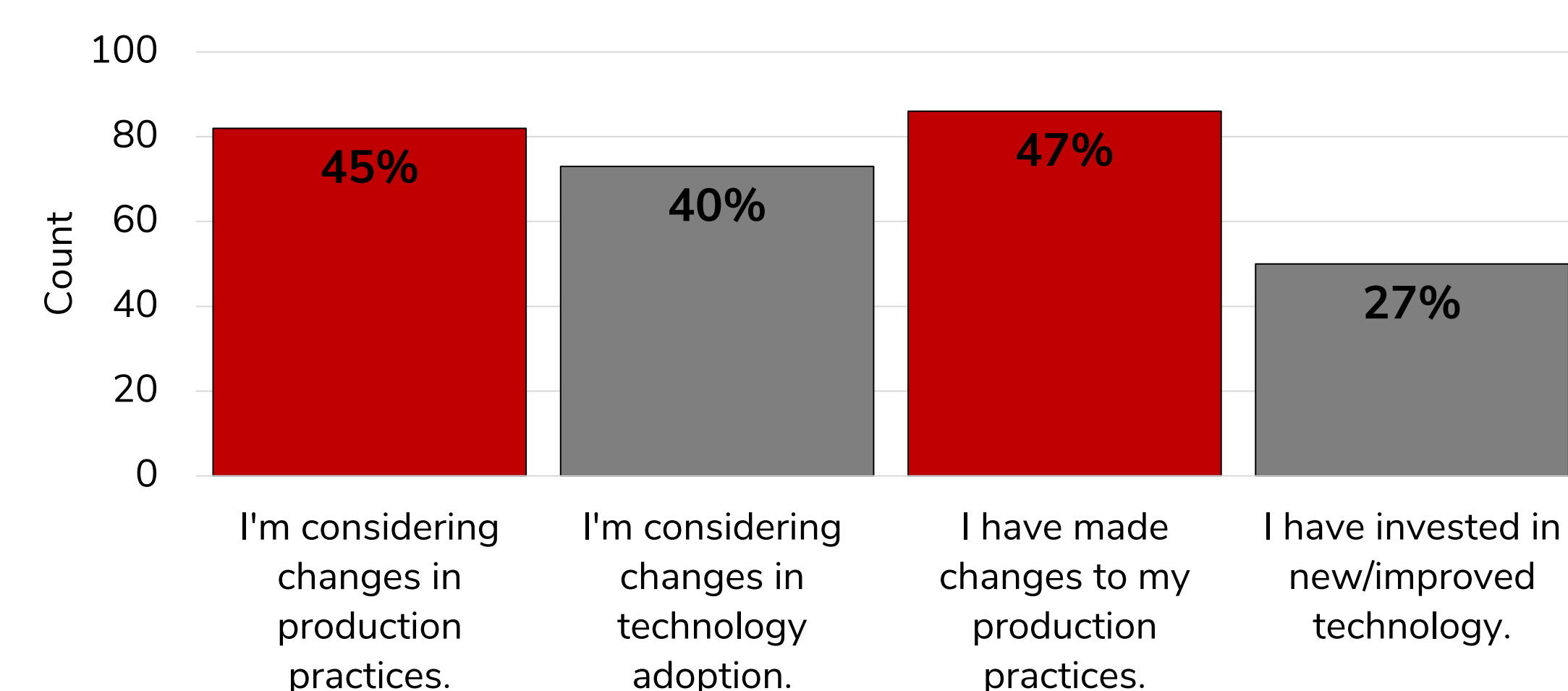


Figure 6. Behavior changes of respondents based on information they have received through the eFields program.

CONCLUSIONS

These impacts highlight how on-farm research directly impacts crop production in Ohio. On-farm research results are relevant to farmers, and the eFields program has proven to be valuable to farmers and agriculture professionals. It showcases the collaborative efforts of Extension professionals in producing highly sought-after, unbiased information. This program is an essential resource for advancing agricultural practices in Ohio.

