



DIVISION OF AGRICULTURE

RESEARCH & EXTENSION

University of Arkansas System

CALL FOR PAPERS

Arkansas Cotton Research Summaries 2023

DEADLINE: March 9, 2024

To: Faculty working in cotton

It's time to compile the *Arkansas Cotton Research Summaries* publication that summarizes our 2023 cotton research. This will be the 34th year that we have produced this publication, and the seventh year that I have edited the publication. It is important that we all contribute, as this document serves as a record for all University of Arkansas System Division of Agriculture cotton research. Last year's publication was posted on the Division of Agriculture and Cotton Incorporated websites. No hard copies were printed.

Please read and follow the instructions provided in the *Guidelines for Research Series Publications* on the following pages. A preformatted template is attached.

The deadline for submitting your report(s) for the *Arkansas Cotton Research Summaries* will be March 9, 2024. The reports should be uploaded following specific instructions under Uploading Report Files below.

We will continue the 1-2 page reports from each cotton station that will summarize weather and any other general observations regarding cotton production on the station. These reports serve as resource that you may use as references and may help to interpret data in the papers.

Also, we will need a photograph for the front cover. If you have a photo associated with your research or one that simply depicts 2023 cotton conditions, submit it to me.

For technical subject matter questions, contact:

Dr. Fred Bourland, Professor
Northeast Research & Extension Center
Keiser, Arkansas, 72351
(870) 243-5200
fbourland@uada.edu

For formatting, editing, style issues, contact:

Gail Halleck, Editor
Division of Agriculture Communications
ghalleck@uark.edu

Thank you,
Dr. Fred Bourland

Guidelines for Research Series Publications

Arkansas Agricultural Experiment Station

ALTERNATIVE TEXT REQUIREMENT: Please provide alternative text (alt text) for each figure and table at the end of the document. Alt text needs to provide different information than that already given in the text. The goal is to describe figures and tables for a person who can't see them, e.g., what are the table headings, the x- and y-axis labels, the type of graph, etc. Try to convey the main takeaway and what the figure or table is conveying. Alt text is required to help us meet federal accessibility rules. For more information on providing alternative text, please visit the [Division of Agriculture's accessibility page](#) and Appendix B for examples.

Report Expectations

Submitted reports should be thorough and of high quality. Reports not meeting the quality expectations outlined in the following document will be returned to the author for further editing. A good report should:

- Clearly communicate the reasons for the research.
- Provide a complete description of materials and methods (field procedures, measurements, statistical analyses, etc.).
- Accurately describe the results.
- Communicate the practical nature of the results.
- Be reviewed by the co-authors.

Report Organization

Title

Authors with affiliations are listed after the title, with footnote superscripts for each author that correspond to their position and rank/title, department, and location. Example:

M.E. Fogleman,¹ J.K. Norsworthy,¹ Z.D. Lancaster,¹ and R.C. Scott²

¹ Graduate Assistant, Distinguished Professor, and Graduate Assistant, respectively, Department of Crop, Soil, and Environmental Sciences, Fayetteville.

² Professor, Department of Crop, Soil, and Environmental Sciences, Lonoke.

Abstract (300-word limit)

Introduction

Procedures

Results and Discussion

Practical Applications

Acknowledgments

Acknowledge all funding sources, as well as the University of Arkansas System Division of Agriculture. Please see Appendix A for an explanation of required acknowledgments for Division work funded by any USDA agency and/or NIFA Capacity Grant.

Literature Cited

Include Tables at the end, and provide figures in separate files

Naming Files

Name report files as follows:

lastname.docx | (e.g., Norman.docx).

If submitting more than one manuscript, add numbers following your name (e.g., Norman#1.docx, Norman#2.docx, etc.).

Uploading Report Files

Upload documents for each report on the [Summaries of Arkansas Cotton Research publication website](#). Select the “Upload Documents Now” button.

Email Dianne Saffire (saffire@uark.edu) with questions about uploading documents.

Body Text Format

At the top right corner of page 1, include information for the corresponding author:

Name
Title/rank
Department
Email address
Phone number

This will be the ONLY corresponding author throughout the process. The final text proof of your submission will be emailed to this address.

1. Use Microsoft Word, 8.5 x 11-in. document.
2. One-inch margins (top, bottom, left, and right).
3. Font: 12-pt Times New Roman for body text.
4. Double-spaced.
5. Number pages at the bottom of the page.
6. Indent paragraphs using tabs (not spaces).
7. Use only one (1) space after all punctuation (periods, colons, etc.).
8. Use spell check. We recommend a Grammarly.com account for a more rigorous spell check. You can sign up for free and don't need to install anything on your computer. Simply upload or copy and paste your text into the browser-based Grammarly editor to perform a thorough spelling and grammar review.
9. Approximate length: six (6) pages, double-spaced text, plus four (4) pages of tables/figures. If more space is needed, contact the editors of the publication.
10. Footnotes: Use numbers (1,2,3) for text footnotes. Letters (a,b,c) are for table and figure footnotes. See the Table Format section below for exceptions.

Table Format

1. Construct ALL tables using Microsoft Word table formatting.
2. Font: 11-pt Calibri.
3. Format tables for a portrait page orientation (approximately 7.5-inch width) to limit the need for landscape-oriented pages. Contact the editor if a landscape-oriented table is required.
4. Table titles and footnotes should be included within the table's cells. This ensures the width of the table and text is consistent.
5. Table titles should be bolded and centered on the first row of the table.
6. Column headers in the top rows should be bolded.
7. Ruling lines should be black, ½-point weight, and solid. Place above and below column headers and at the end of tables (above footnotes). No vertical dividers or other horizontal lines are necessary.
8. If letters a, b, and c are used to denote significant differences in tables, please add a footnote explaining this use. In this case, symbols must be used in place of letters for footnotes. Use symbols in this order: †, ‡, §, ¶, #, ††, ‡‡, §§, ¶¶, ##, etc.
9. Each table should be able to stand alone (i.e., no need to reference text). Explain abbreviations in footnotes.
10. All tables should be placed together in order at the end of the file after the text and literature cited section.

Please refer to the examples on the following page.

Bold titles, column headings, & units.

½-pt ruling line borders only above and below column headers and at the bottom.

All table text is Calibri, 11-pt font.

Title is included in the top row of the table.

Table 9. The percentage of sampled acres as distributed within five soil-test levels and median Mehlich-3 extractable magnesium (Mg) by geographic area for soil samples submitted to the University of Arkansas System Division of Agriculture's Soil Testing and Research Laboratory in Marianna from 1 January 2017 through 31 December 2017.

Geographic area	Mehlich-3 soil Mg ^a (ppm)					Md ^b (ppm)
	<31	31-50	51-140	141-500	>500	
	-----(% of sampled acreage)-----					
Ozark Highlands - Cherty Limestone and Dolomite	1	3	48	44	4	135
Ozark Highlands - Sandstone and Limestone	1	7	44	46	2	138
Boston Mountains	3	14	55	26	2	95
Arkansas Valley and Ridges	2	7	57	31	3	110
Ouachita Mountains	1	4	63	31	1	111
Bottom Lands and Terraces	1	2	31	45	21	206
Coastal Plain	4	15	56	23	2	89
Loessial Plains	0	1	28	66	5	202
Loessial Hills	0	2	19	75	4	240
Blackland Prairie	4	7	36	53	0	153
Average	2	6	44	44	4	148

^a Analysis by inductively coupled argon plasma spectroscopy (ICAP) in 1:10 soil volume:Mehlich-3 volume.
^b Md = median.

Footnotes are included in the bottom row of the table.

Define abbreviations in footnotes. Tables should stand alone from body text.

Units go under ruling line, directly over column or spanning columns.

Table 5. Effect of K-fertilization rate on corn grain yield for four trials conducted in Chicot (CHZ82), Clay (CLZ82), Lee (LEZ82), and Lonoke (LOZ82) counties during 2018.

K rate (lb K ₂ O/acre)	Grain yield			
	CHZ82	CLZ82	LEZ86	LOZ82
0	110 b [†]	141 b	115	178
50	149 a	192 a	113	197
100	160 a	188 a	115	198
150	-	170 a	117	182
200	174 a	183 a	111	196
C.V., % [‡]	9.7	7.6	9.2	7.9
P-value	0.0593	0.0054	0.8626	0.3758

[†] Means followed by the same letter are not significantly different at P = 0.10.
[‡] C.V., Coefficient of variation.

If letters a, b, and c are used to note significance, use symbols in this order: †, ‡, §, ¶, #, ††, ‡‡, §§, ¶¶, ##, etc.

Significant letters should be in the same table cell as the value.

Decimal align values in the same column.

Figure Format

1. 300 DPI minimum resolution.
2. Font: 11-pt Calibri for all figure text, including axes labels, legends, etc.
3. Change text color to black from the default gray color in Microsoft Word and Excel.
4. For graphs created in Word, set borders to black, ½-point solid ruling lines.
5. Center figure captions below each figure. Label as follows: “Fig. 1. description.”
6. Provide original Word or Excel files for graphs created in those programs. Do not send TIFF, PDF, or JPG image files of figures created in Word or Excel.
7. Save figures created outside of Word or Excel (e.g., SigmaPlot) as 300 DPI high-resolution TIFF images (high-resolution JPG and PDF files are also acceptable).
8. Figures may use color when necessary. Choose muted colors and avoid bright, neon colors. Use a color-blind safe palette by avoiding red and green.
9. Papers with embedded figures will be returned and not accepted.
10. Format figures for a portrait page orientation (approx. 7-1/2 inch width) to limit the need for landscape-oriented pages.
11. If letters a, b, and c are used to denote significant differences in a figure, please explain in the figure caption (see example).
12. Each figure should be able to stand alone (i.e., no need to reference text). Explain abbreviations in the caption.

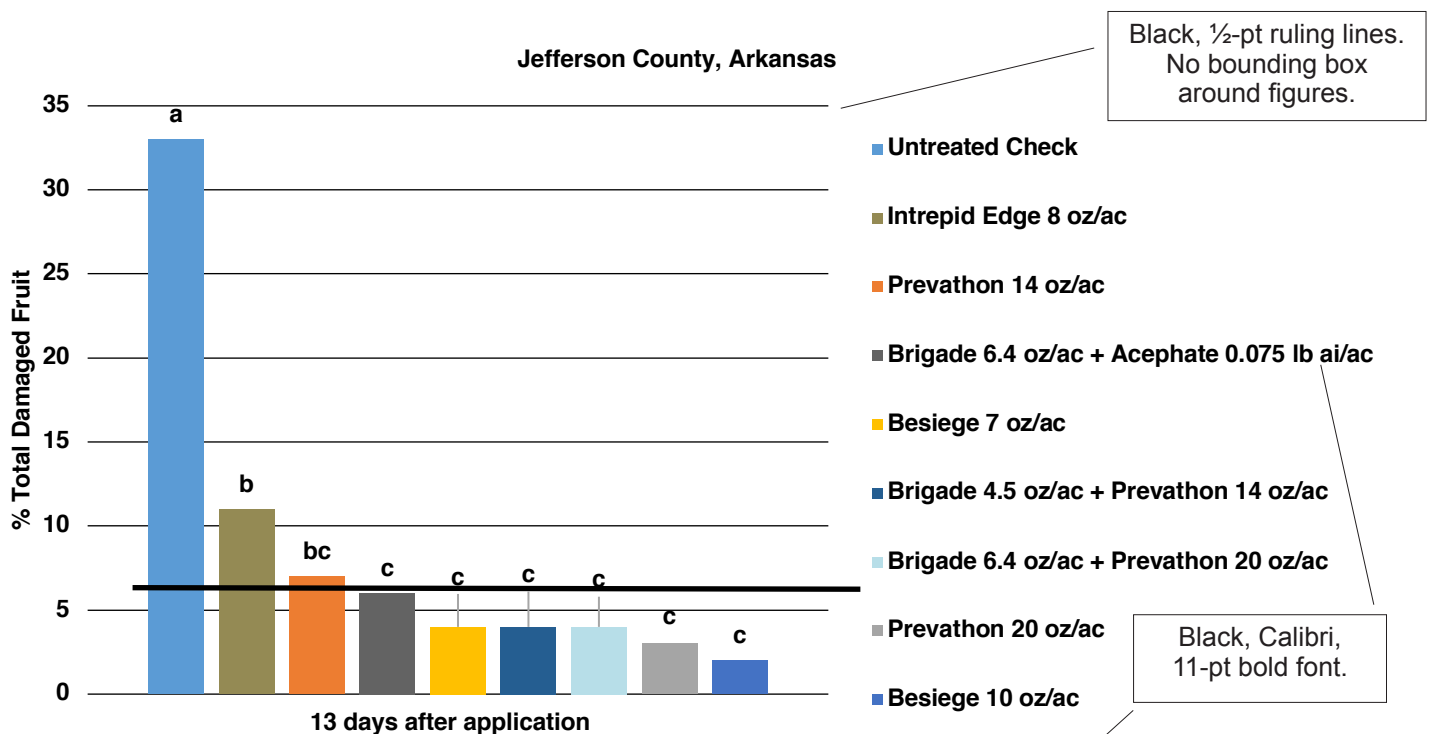


Fig 3. Assessment of bollworm-damaged fruit 13 days after application of foliar insecticide on a non-*Bacillus thuringiensis* (*Bt*) cotton cultivar in 2018. Treatments with the same lowercase letter are not significantly different according to Fisher's protected least significant difference at $\alpha = 0.1$.

Define abbreviations in the caption.

Explain significant differences in the caption.

Style Issues

1. Abbreviations: Spell out abbreviations at first instance in Abstract AND again in the main body of the article. Example: "Rice Research Verification Program (RRVP)."
2. Units: Use English units for all measurements. If necessary to indicate metric units, place them in parentheses next to English units. Common abbreviations: foot = ft, inch = in., hour = h, acre = ac, bushel = bu., etc.
3. In general, use numerical symbols as opposed to spelling out numbers, even "one" through "nine." Correct examples:
 - The treatment was replicated 3 times.
 - The flavor was given a rating of 3.
 - Plate waste was 3% of total intake.
4. In a series of three or more terms with a single conjunction, use a comma after each term except the last. Example: The American flag is red, white, and blue.

Literature Cited Format

1. In-text References: Use the author/date reference system (Smith, 1991) in the text. Textual citations to multiple authors are handled as follows:
 - Two authors (Smith and Franklin, 1991);
 - Three or more authors (Smith et al., 1991).
 - If there is more than one "Smith et al., 1991," distinguish them by 1991a, 1991b, etc. according to the alphabetized listings in the literature cited section. In the text, the citation would be: (Smith et al., 1991b).
2. Order of Citations: Alphabetize the literature cited by the author's last name. If the author is the first author on more than one article, list first those articles on which s/he is the only author (in chronological order). Multiple author articles then follow, alphabetized by the second author's last name. If the second authors are the same as well, then go to the third author, etc. If all authors are the same, then arrange chronologically by publication date.
3. Literature Cited style: note that the order for the first author is the last name comes before initials, and for subsequent authors, initials are first followed by the last name.
4. Include access dates for web articles (all links must work properly).

Examples:

Shah, U., A. Proctor, J.O. Lay Jr, and K. Moon. 2012. Determination of CLA trans, trans positional isomerism in CLA-rich soy oil by GC–MS and silver ion HPLC. *J. Amer. Oil Chem. Soc.* 8:979-985.

The Pew Research Center. 2014. Internet and Technology. Accessed: 8 December 2014. Available at <https://www.pewInternet.org/>

Publication Specific Reminders:

1. Many papers are obviously not reviewed/read by co-authors. As professionals, all co-authors are responsible for approving the paper before it is submitted. Particular attention should be given to technical language associated with a specific discipline.
2. Abstracts are often not in an acceptable form. An abstract should provide a short description of the rationale, objective(s), methods, results, and conclusion(s) associated with research.
3. Released names for varieties/cultivars should be used. Companies approve the names of their varieties that are used in the Arkansas Cotton Variety Test annual publication in the cotton section at <https://aaes.uark.edu/variety-testing/>.
4. Figures and tables must stand alone. Illustrations should be understandable without additional text. Always include the year and location associated with the illustration.
5. If experiments were analyzed as split-plot or factorial, the effects of all factors and interactions should be included. In some cases, this can be done by simply stating in text or illustration footnote that certain factors and/or interactions were not significant.
6. Do not use the term “bloom/blooming” to refer to “flower/flowering.” Botanically, the term “bloom” refers to a waxy substance that may naturally occur on stems and leaves.
7. Citations in text that have more than 2 authors should be referenced as follows: 1) in the sentence as “Smith et al. (2019) indicated that . . .” or 2) at the end of the sentence as “(Smith et al., 2019)”.
8. Citations typically do not need to be cited more than once in a paragraph. One exception is after you cite a second reference, you need to cite the first one again in the same paragraph.
9. Abbreviations:
 - a. United States as “U.S.” not “US” or “USA”.
 - b. Names of U.S. states should be spelled out in text when used in conjunction with the city, e.g., “Keiser, Arkansas”
 - c. Table should not be abbreviated at “Tab.”
 - d. Figure as “Fig.” not “Figure”.
 - e. Pounds as “lb” not “lbs” or “lbs.”
 - f. Gallons as “gal” not “gal.” or “gals.”
 - g. Ounces as “oz” not “oz.”
 - h. Foot/feet as “ft” not “ft.”
 - i. Inch/inches as “in.” not “in”
 - j. Minutes as “min” not “min.”
 - k. Hours as “h” not “hr”
 - l. Acre as “ac” not “a” or “A”
 - m. Do not use “-1” for “per” (e.g., pounds per acre “lb/ac” not lb a⁻¹)
 - n. No periods following metric measurement abbreviations.
 - o. Do not establish an abbreviation for a term that is not used again in the paper, e.g. “(TPB)” added to one-time statement of “tarnished plant bug”.
10. When referencing a company, you should include contact information, e.g., city and state of company headquarters.
11. Both trade and chemical names of products used should be included.
12. Do not mix English and metric units. Since these summaries should be easily understood by the general public, English terms (e.g., “lb/ac” rather than “kg/ha”) are preferred but may not always be practical. Metric units can be added in parenthesis, e.g., “lint yield was 1000 lb/ac (1120 kg/ha)”.

Required Acknowledgment of USDA Grant Funding in Publications

As the Division receives funding support through grants from any USDA agency for our research and extension programs/projects, we must acknowledge such support when publishing material written or published with the grant support. Therefore, when publicizing a program/project that was supported at least in part by a USDA agency grant, we must acknowledge the USDA awarding agency support by using one of the following statements on publications written or published with grant support and, if feasible, on any publication reporting the results of, or describing, a grant-supported activity:

- *“This material is based upon work that is supported by the [insert name of USDA agency that awarded grant], U.S. Department of Agriculture, under award number XXX-XXXX-XXXXX.”*
or
- *“This material is based upon work that is supported, in part, by the [insert name of USDA agency that awarded grant], U.S. Department of Agriculture, under award number XXX-XXXX-XXXXX.”*

One of the above acknowledgment statements must be included in any publication supported by USDA grant funds, depending on whether the USDA grant fully supported or partially supported the material. For purposes of this acknowledgment, “publication” means a published book, periodical, pamphlet, brochure, flyer, or similar item. It does not include any audiovisuals. For example, if a publication was written or published with partial support from a National Institute of Food and Agriculture (NIFA) grant, the publication would include the following acknowledgment statement:

- *“This material is based upon work that is supported, in part, by the National Institute of Food and Agriculture, U.S. Department of Agriculture, under award number XXX-XXXX-XXXXX.”*

Additionally, except in papers published in scientific journals, if a publication, article, or paper is published about an Extension or Research project/program that has been supported by USDA agency grant funds, you must include the following statement:

- *“Any opinions, findings, conclusions, or recommendations expressed in this publication are those of the author(s) and do not necessarily reflect the view of the U.S. Department of Agriculture.”*

NIFA CAPACITY GRANTS

In addition to the above, the USDA-NIFA has also requested that publications written or published (at least in part) with NIFA capacity grants be acknowledged by use of the following language:

- *“This work is/was supported, at least in part, by the USDA National Institute of Food and Agriculture, [insert project type, e.g., Hatch/Evans-Allen/McIntire Stennis] project [insert accession number].”*

Example:

- *“Project funding was provided by Arkansas Fertilizer Tonnage Fees administered by the Soil Test Review Board and the University of Arkansas System Division of Agriculture. This work was supported, at least in part, by the USDA National Institute of Food and Agriculture, Hatch project ARK 2734.”*

Alternative Text Examples**Table 2. Lint yield and ranking (R) of varieties in the 2021 Arkansas large-plot variety testing program.**

Variety Name	Ashley County		Desha County		Jefferson County		Lonoke County		Mississippi County		Poinsett County		St. Francis County		Average Rank	
	Lint lb/ac	R	Lint lb/ac	R	Lint lb/ac	R	Lint lb/ac	R	Lint lb/ac	R	Lint lb/ac	R	Lint lb/ac	R	Lint lb/ac	R
NG 3195 B3XF	1469	2	1357	6	1390	3	1126	5	1854	4	1639	2	1905	1	1534	3.5
PHY 411 W3FE	1562	1	1671	1	1460	1	1120	6	1631	11	1659	1	1716	4	1546	3.6
DP 2127 B3XF	1460	3	1320	9	1291	9	1190	3	1915	2	1601	3	1807	2	1512	4.7
DP 2038 B3XF	1425	4	1314	10	1407	2	1281	1	1946	1	1532	5	1627	10	1505	4.7
ST 5091 B3XF	1384	6	1386	4	1377	4	1180	4	1734	6	1517	6	1642	7	1460	5.2
ST 4993 B3XF	1323	8	1437	3	1335	6	1099	7	1600	12	1569	4	1651	6	1431	6.6
DP 1646 B2XF	1353	7	1362	5	1356	5	1004	10	1858	3	1495	7	1494	11	1417	6.8
DG 3456 B3XF	1242	12	1329	7	1325	8	1247	2	1804	5	1399	8	1464	12	1401	7.7
PHY 400 W3FE	1389	5	1258	12	1331	7	1068	9	1647	8	1370	10	1716	3	1397	7.7
DP 2020 B3XF	1316	9	1457	2	1199	12	935	12	1674	7	1389	9	1636	9	1372	8.5
DG 3644 B3XF	1304	10	1324	8	1234	11	1092	8	1642	9	1280	12	1641	8	1360	9.4
NG 4936 B3XF	1302	11	1307	11	1274	10	971	11	1637	10	1302	11	1666	5	1351	9.9
LSD $P = 0.05$	75.6		165.7		79.5		Not replicated		84.5		153.2		121.2			

Alternative Text:

Lint yield and ranking, including average rank, of varieties in the 2021 Arkansas large-plot variety testing program for Ashley, Desha, Jefferson, Lonoke, Mississippi, Poinsett, and St. Francis counties. Variety PHY 411 W3FE was ranked number 1 in 4 counties, DP 2038 B3XF, in 2 counties, and NG 3195 B3XF, in 1 county.

Please note the difference in the level of explanation between the table title above the table and the Alt Text. Alt text should be phrased for a person that cannot see the table so that it paints a picture for them.

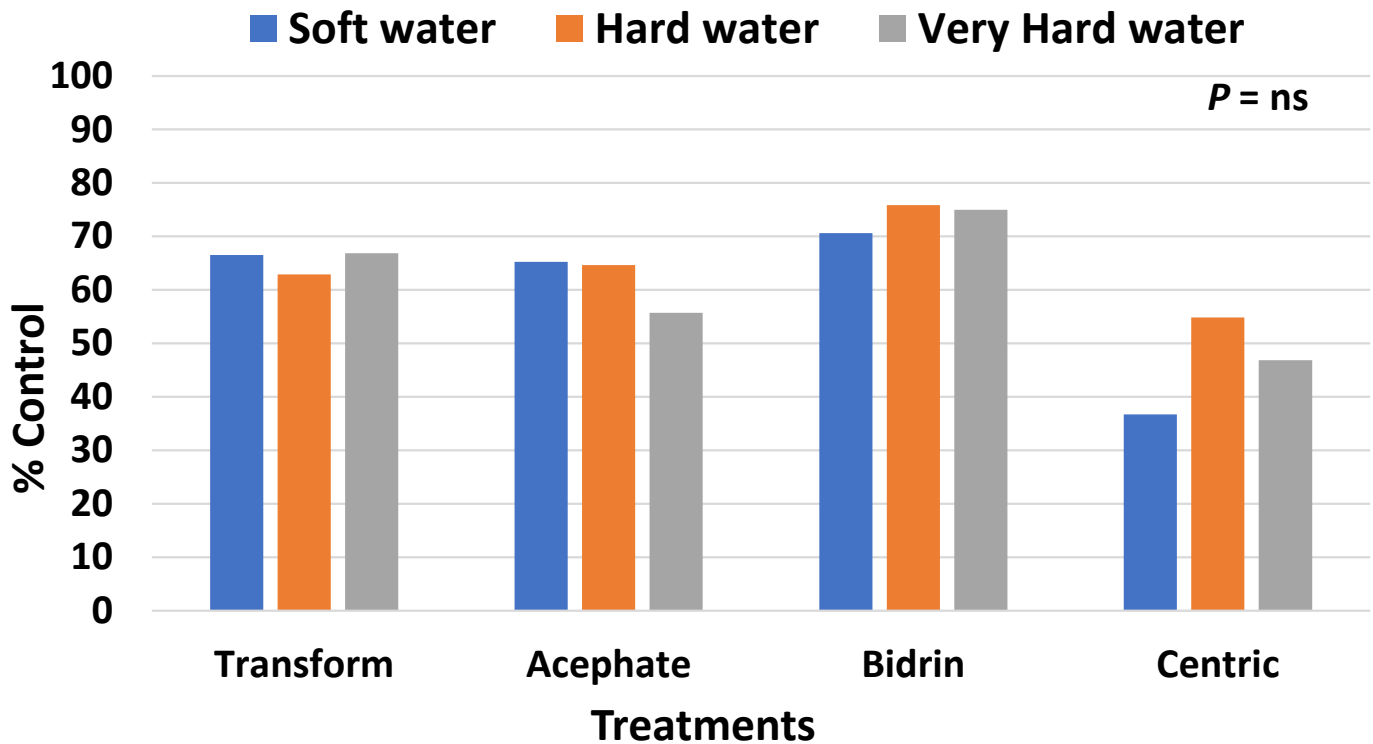


Fig. 1. Percent control of tarnished plant bugs in cotton for multiple insecticides in different water hardnesses, Marianna, Arkansas, 2021, 3 days after application.

Alternative Text:

A bar graph showing percent control of tarnished plant bugs in cotton on the y-axis 3 days after application of the insecticides shown on the x-axis: Transform, Acephate, Bidrin, and Centric. The bars show treatments in soft water (blue), hard water (orange), and very hard water (gray). No differences in tarnished plant bug control were observed among treatments at 3 days after application.

Please note the difference in the level of explanation between the figure caption and the Alt Text. Alt text should be phrased for a person that cannot see the figure so that it paints a picture for them.