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Introduction to the Current Research Information System - CRIS

CRIS is the Cooperative State Research, Education, and Extension Service (CSREES) automated system for storing and retrieving information on current research in the agricultural and forestry sciences. Sources include:

- USDA (United States Department of Agriculture),
- SAES (State Agricultural Experiment Stations),
- forestry schools,
- land grant institutions of 1890 and Tuskegee University,
- schools of veterinary medicine, and
- other institutions receiving CSREES awarded grants

All research sponsored or conducted by the USDA is required to be documented in CRIS. Cooperating non-Federal institutions voluntarily report all non Federal research projects as well.

Over 95 percent of all publicly supported agricultural and forestry research is documented in CRIS, and the system contains both management and scientific data. The current database consists of more than 30,000 research projects.

The basic unit for reporting research is the research project or research work unit. A research project is defined as an activity at a single location that addresses a clearly definable problem, a sizable part of a larger problem, or a number of closely related elements of a logical and manageable problem. A location is a duty station where the funding and the scientist responsible for the project are assigned. Normally, a research project will not exceed five scientist years of effort.

Data from non Federal institutions are submitted to CRIS via four electronic forms:

Research Resume	AD-416
Classification of Research	AD-417
Research Funds and Staff Support	AD-419
Progress Report	AD-421

CRIS Project Management System

The "Project Management System" is the CRIS database system designed to track all projects during processing and is the method by which the unique accession number is assigned to each project. Project information is permanently maintained in the management system.

The Project Management System ensures an up-to-date method of determining project status in the project processing, review, and approval procedures. The Management System can be searched by any data field listed on the AD 416/417 forms, and includes the following information:

- process date
- date sent to review group
- group assignment/date of group assignment
- reviewer assignment/date of reviewer assignment
- reviewer action/date of reviewer action
- date returned to CRIS
- date project completed and sent to project records office

Information Services

USDA research agencies, State research institutions, and researchers use CRIS technical data to:

- help prevent duplication,
- access up-to-date information in their areas of expertise,
- make contacts with other scientists doing similar research, and
- answer Congressional and other legislative requests.

The CRIS database is available for online access via CRIS Website at:

http://cris.csrees.usda.gov/

- CRIS fiscal data are a valuable resource for Federal and State research administrators, managers, planners, and scientists.
- CRIS provides the only readily available source of detailed data on publicly supported agricultural and forestry research.
- At the Federal level, CRIS data are primarily used to plan programs and budgets, track resources in specialized research areas, and to answer legislative and executive branch questions.

Information services are provided at no charge to scientists and managers at participating USDA and State institutions. Retrievals are conducted for client institutions by the CRIS staff. Requests are accepted via e-mail at:

cris@cris.csrees.usda.gov

Form AD-416: Research Resume

Submitted at a project's inception or revision, the Research Resume includes:

- project identification
- project status
- title
- integrated activity
- performing organization
- cooperating departments
- multi-state project number
- cooperating states
- investigator names
- project contact
- funding type
- grant award information
- start date
- estimated termination date
- objectives
- approach
- non-technical summary
- keywords

AD-417: Classification of Research

Classification procedures are specified in the Manual of Classification of Agricultural and Forestry Research.

Mandatory categories are:

- basic, applied, and developmental;
- Knowledge Area (KA);
- subject of investigation; and
- field of science

This form is submitted at a project's inception or revision.

AD-419: Research Funds and Staff Support (Non Federal Institutions)

- The AD-419 is used to report funds and staff support on individual research projects.

- This form is filed for each Federal fiscal year (October 1 to September 30).

- CRIS maintains a fiscal history database, which includes information on funds, staff support, and classification data from previous fiscal years.

- Specific instructions for preparing the AD 419 can be found in the Manual for Preparing CRIS Form AD-419, Research Funds and Staff Support, for State and Non Federal Institutions.

AD-421: Progress Report

- Progress reports and citations to publications are submitted annually for all active projects.

- Institutions have the option of reporting on either the calendar year or the Federal fiscal year.

- A final summary report detailing the history of the project is required when the project is terminated.

- A progress history database includes all previous progress or publication data for each active project.

CRIS Forms Assistance Program - Web Forms

CRIS data must be submitted electronically via the Web Forms site at: http://cwf.uvm.edu/cris/

Submitting projects electronically via CRIS Web Forms:

The following procedures must be observed by State Cooperators:

1. The institution will provide CSREES with a one-time written statement stipulating that all project documentation, for both new and revised projects submitted electronically, may be considered to have been approved by the director or authorized designee. The names of all officials with approval authority shall be included as part of the statement. Statements should be forwarded via surface mail to:

    Current Research Information System
    USDA/CSREES/ISTM
    1400 Independence Ave., S.W.
    Stop 2270
    Washington, DC 20250

2. The electronic forms will include the approving official's name, title, date of approval, and an indication that a signed copy of the form is on file.

3. The institution must agree to retain the original signed documents in their files for at least three years after termination for audit purposes.

4. After review and approval by CSREES, the following documents will be returned to the cognizant institution for retention:

    A. Simulated CRIS Forms AD 416/417 with the signature of the reviewing CSREES official and the date of approval.

    B. An original CSREES Form 166 (Project Review and Comment Sheet) with the signature of the reviewing CSREES official and the date of approval.

    C. A simulated CSREES Form 2008 (Assurance Statement) with the signature of the reviewing CSREES official and the date of approval.

5. CSREES will retain copies of the documents specified in item 4 in the project records office for one year following termination of the project.

Please contact the CRIS office for further information.

Research Project Requirements

(Please refer to the appropriate Administrative Manual)

All project information and/or changes should be submitted electronically via the CRIS Web Forms site.

Requirements for:

- CSREES Formula Funded Projects
- Non-Federal (State) Projects
- CSREES Grants and Cooperative Agreements

CSREES Formula Funded Projects - Hatch, Hatch Multistate, McIntire-Stennis, Evans-Allen, Animal Health

A. To establish a new formula funded project:

1. Completed AD-416/417 Forms
2. CSREES Form 2008, Assurance Statement
3. Project Outline (not required for Multistate projects)

B. To extend a formula funded project:

1. A one time, one year, extension is allowed without reviewer approval. Subsequent extensions require written justification and reviewer approval.
2. Extensions for Multistate projects are determined by the Multistate Office and are extended by notification to CRIS. If the Multistate Office terminates a Multistate project, the performing organization has the option to extend the project for one year using regular Hatch funds. The CRIS office should be notified if discrepancies occur.

C. To revise a formula funded project:

1. Completed AD-416/417 Forms
2. CSREES Form 2008, Assurance Statement
3. Project Outline (not required for Multistate Projects)

CSREES Grants and Cooperative Agreements

A. To establish a New Grant/Cooperative Agreement Project:

1. Completed AD-416/417 Forms

   It is essential that all grants and cooperative agreements be fully documented in CRIS. To ensure compliance, CSREES procedures require the receipt of completed CRIS forms AD-416 and AD-417 in the CRIS database before the release of funds. At the time of the award notification, grantees will be advised by the CSREES program manager of their responsibility regarding CRIS documentation.

B. To extend a Grant or Cooperative Agreement:

1. Follow procedural guidelines established by the grant program office.

Non-federal (State) Projects

A. To establish a new State Project:

    1. Completed AD-416/417 Forms

B. To extend a State Project:

Extensions for State projects should be should be submitted via a change file using CRIS Web Forms.

C. To revise a State Project:

    1. Completed AD-416/417 Forms

Processing, Review, and Approval Process

CSREES Formula Funded Projects

1. State Cooperator

    Submits project to CRIS via Web Forms

2. CRIS Data Management Unit

    Retrieves project data from Web forms
    Loads project data into CRIS database via Project Management System
    Prints AD-416/417/662 forms
    Insures documentation is complete
    Provides follow up if necessary

3. CRIS Data Management Unit

    Assigns project to review group
    Adds project tracking information to Project Management System
    Prints review and comment forms
    Assembles folder
    Forwards folder to review group coordinator

4. CSREES Group Coordinator

    Assigns project to reviewer via web tracking system

5. CSREES Project Reviewer

    Approves or defers project
    Returns project to group coordinator

6. CSREES Group Coordinator

    Logs project review information via web tracking system
    Returns project folder to CRIS office

7. CRIS Data Management Unit

    Logs project as complete via web tracking system
    Returns copies of approval documentation to State Cooperator
    Forwards project folder to Central File (CSREES)

8. CRIS Systems Management Unit

    Updates CRIS Web Site with current database (weekly)

CSREES Funded Grants

1. Grantee

    Submits AD-416/417 forms to CRIS via Web Forms.

2. CRIS Data Management Unit

    Retrieves project data from Web Forms
    Loads project data into CRIS database as PENDING**
    Prints AD-416/417 forms

3. Grants Office

   Provides CRIS with data file of grant award information

4. CRIS Data Management Unit

   Processes data file and crossloads grant award information into the CRIS database. Extension or renewal information is entered into CRIS upon notification from the CSREES Grants Office.

   Removes pending status grant award information is complete in CRIS.

   Provides copies of AD 416/417 forms to OEP and Grantee

5. CRIS Data Management Unit

   Requests Final Technical Reports from Grantee (Monthly)
   Updates CRIS database with Final Technical Reports (Daily)
   Provides Final Technical Reports to OEP and NRI (Monthly)

6. CRIS Data Management Unit

   Requests Progress Reports and Financial Data (Annually)
   Updates CRIS Database with Progress Report information (Daily)

**PENDING grant information is not available to the public via the CRIS web site.

State Projects

AD-416/417 Forms for new State projects are assigned a CRIS Accession Number upon processing into the CRIS Project Management System. Information copies of the AD-416/417 forms are returned to the partner institution.

AD-416 Detailed Instructions

Form AD-416 - Research Resume

Reporting Instructions

Each field or data item on form AD 416 is identified by a number or name. These instructions are keyed to those numbers and names.

	Date
Field 1	Accession Number
Field 2	Agency/Institution Type
Field 3	Institution Code
Field 5	Work Unit/Project Number
Field 6	Status
Field 7	Project Title
	Integrated Activity
Field 8	Performing Organization
Field 9	Cooperating Departments within Performing Institution
Field 10	Multistate Project Number
Field 11	Cooperating States - non-multistate projects
Field 12	Investigator Name(s)
Field 13	Project Contact
Field 14	Project Type
Field 15	Contract/Grant/Agreement No.
Field 16	Amount
Field 17	FY
Field 18	Award Date
Field 19	Start Date
Field 20	Termination Date
Field 21	Objectives
Field 22	Approach
Field 23	Non-Technical Summary (situation or problem / purpose)
Field 24	Keywords
	Signature Blocks

Date

Date: Will be inserted via Web Forms.

Field 1: Accession Number

Leave blank if submitting a new project. The accession number is the unique CRIS control number and will be assigned by the CRIS office. Enter existing accession number if submitting a revision.

Fields 2 - 3: Agency Identification

The agency identification identifies up to three levels of organizational structure for the contributing agency or institution.

Field 2: Agency/Institution Type

Restrictions: Field 2 is the three- or four-character code for the funding agency or type of organization.

CSREES	Cooperative State Research, Education, and Extension Service - Projects funded by CSREES Formula Programs or CSREES funded grants.
CSVM	Cooperating Schools of Veterinary Medicine Projects funded by State appropriations or other non-CSREES sources.
OCI	Other Cooperating Institutions Projects at Forestry Schools and Land Grant Schools of 1890 or Tuskegee University funded by State appropriations or other non-CSREES sources
SAES	State Agricultural Experiment Station Projects funded by State appropriations or other non-CSREES sources.

Field 3: Institution Code

Field 3 is the designated three- or four-character Institution code. With the exception of State Agricultural Experiment Stations, the last character in the code denotes the following:

X	1890 Institution or Tuskegee University
Y or Z	School of Forestry
V	School of Veterinary Medicine
K, R, or W	A public or private institution or a land grant institution where the college or department of the principal investigator is not affiliated with the SAES, 1890/Tuskegee, Forestry, or Veterinary Schools.

- "K"   used only with the Small Business Innovation Research Grant Program.
- "R"   used only with the NRI Competitive Grants Program.
- "W"   used only for grants other than NRI Competitive Grants or Small Business Innovation Research Grants.

Field 5: Work Unit/Project Number

- Enter the Work Unit/Project No., composed of up to 20 characters without punctuation, always containing your institution code (e.g. LAB or WNP), and, depending on your institution's own convention, may include a " " or a "0" (e.g. VT or IOW0).

- All project numbers must be unique.

- When entering a new AD-416, if you are not normally the one to assign this number, enter your last name after your institution's prefix.

- *Restrictions:* The project number must not exceed 20 characters and should follow local coding conventions for projects with the exception that the project number must be prefixed with a variation of the three or four character institution code (field 3) to ensure a unique identity across all stations.

example: ILLU-12-0320

Field 6: Status

A =   NEW Projects submitted for approval.
C =   REVISED Projects - projects that have exceeded their termination date and a revision is requested.

For information, CRIS uses the following status codes:

F =   Pending
A =   New
B =   Extended
C =   Revised
E =   Terminated

Field 7: Project Title

- Titles are limited to 140 characters, including symbols and spaces.

- Do not use phrases such as "research on", "investigation of," etc.

- Quotation marks and underscoring are not acceptable.

- NOTE: Multistate Research project titles must be entered exactly as approved by the Multistate Research Office.

- The title will be used in information retrieval searches and to construct the project classification table.

Integrated Activity

This optional field can be used by the site to identify activities which qualify as "integrated" according to the following CSREES guidelines:

For Formula Funded projects:

Integrated activities mean jointly planned, funded, and interwoven activities between research and Extension to solve problems. This includes the generation of knowledge and the transfer of information and technology.

For Grants:

Integrated means to bring the three components of the agricultural knowledge system (research, education, and extension) together around a problem area or activity.

Field 8: Performing Organization

Performing organization for State partner institutions will be automatically entered via Web Forms.

Non-cooperating institutions should enter complete mailing address of the organization/institution performing the research.

Field 9: Cooperating Departments within Performing Institution

Select or enter performing institution departments cooperating in the research.

Field 10: Multistate Project Number

The Multistate project number identifies projects supported by Multistate Research funds, or those formally on record as contributing to a Multistate research project. This number combines the region (NE, NC, S, IR, or W) and the project number.

examples:

NC-205
W-187

The multistate region and number must be left blank for non-multistate projects.

Field 11: Cooperating States-non multistate projects

Identify any OTHER STATES that are participating in the same research project. Include only states that are significantly contributing to the research effort on this project. Fill this in for non-Multistate Research Projects only.

Field 12: Investigator Name(s)

A total of 12 can be listed. List the Principal Investigator on Line 1. Lines 2 through 12 are used for co-investigators. Use upper/lowercase as customary for proper names.

example:

Brown J R
Johnson III J R
Smith Jr A C

Field 13: Project Contact

The project contact should be a person or office that would best answer questions about research issues which may potentially be controversial. Sites may prefer to identify the contact for some or all projects as the Director's office or Public Relations office and not the principal investigator.

If applicable, include a URL that is complete and project specific.

example: http://cwf.uvm.edu/cris/

Field 14: Project Type

Code	Description
A	Animal Health
C	NRI Competitive Research Grants
G	Special Grants
H	Hatch
K	Small Business Innovation Research Grants
M	McIntire-Stennis
O	Other Grants - (not listed above)
P	Cooperative Agreement
S	State
T	Evans-Allen

NOTE: State projects are research projects funded from sources other than the Cooperative State Research, Education, and Extension Service.

Fields 15 - 18

For USDA Contracts, Grants, Cooperative Agreements:

Field 15: Contract/Grant/Agreement No.

"NOT YET AWARDED" must be entered.

Proposal No.

Enter proposal number exactly as provided by CSREES Grant Office.

example: 200X-01234

Field 16: Amount

Leave blank.

Field 17:   FY

Leave blank.

Field 18: Award Date

Leave blank.

Field 19: Start Date

Enter date research will begin.

example: 05/01/2002

Leave blank for grants or cooperative agreements.

Field 20: Termination Date

Enter the Estimated Termination Date for the project.

example: 04/30/2007

Leave blank for grants or cooperative agreements.

Field 21: Objectives

- Enter a clear, concise statement of the objectives of the research, which should be specific and attainable within the duration of the project using the resources available.

- Certain characters can be a problem with certain browsers.

- Remember that you can paste in text from your word processor or other document.

- For Multistate Research Projects, enter the objective(s) exactly as defined in the multistate project outline.

- *Restrictions:* Not to exceed 3200 characters.

Field 22: Approach

- Describe the ways in which the research is to be conducted, with emphasis on the scientific methods and any unique aspects or significant departures from usual approaches.

- Certain characters can be a problem with certain browsers.

- Remember that you can paste in text from your word processor or other document.

- *Restrictions:* Not to exceed 3200 characters.

Field 23: Non-Technical Summary

This information is designed to enhance the usefulness of the CRIS database, especially to legislative and other public audiences. Follow the instructions given by the granting agency regarding this summary. Address both the SITUATION that creates a need for this research and the PURPOSE of this project.

The **SITUATION or PROBLEM** the project addresses.

example:

Dietary deficiencies of individual essential amino acids have been shown to vary in their effects on growth, organ weights, thyroid function, and efficiency of energy utilization in growing chickens.

The **PURPOSE** of the project.

example:

The extent to which individual amino acids produce these effects and the dietary levels at which the effects are observed are being studied.

Restrictions: Not to exceed 1600 characters.

Field 24: Keywords

The assignment of appropriate keywords is aimed at improving retrieval of project information. Collectively, the keywords for a given project should resemble an abbreviated abstract of the project narrative.

Choose keywords that describe the nature of the study at the following three levels:

General Entry - Refers to overall objectives in the major fields of interest or disciplines. Select at least two general entry keywords.

example:

HARVESTING
MECHANIZATION

Class Entry - Refers to classes or categories of subjects or items, and to moderately broad concepts or areas of interest which conceptually group the specific entry keywords into like classes. Select at least four class entry keywords.

example:

MECHANICAL ENGINEERING
EQUIPMENT
HARVESTING LOSSES
CROP DAMAGE

Specific Entry - Refers to the most specific concepts, subjects, or items under study. It includes the specific plant, animal, or microorganism; the specific equipment, processes, approach, technique, or system; and specific properties, reaction or function. Select at least six specific entry keywords.

example:

POTATOES
MECHANICAL HARVESTING
HARVESTING EQUIPMENT
BULK HANDLING
SKINNING
BRUISING

- A convenient rule of thumb is the "2-4-6" formula - two general terms, four moderately broad or class terms, and six specific terms.
- A minimum of 12 keywords averaging 15 characters each, including one space between each keyword, would result in a total character count (192) well within the maximum allowed (345 characters and spaces).
- Use one keyword/phrase per line; do not use hyphens to link phrases; limit to 20 lines
- To promote effective retrieval, the number of keywords assigned to a project should range between 10 and 15.
- The total number of keywords submitted on a project should not exceed 20.
- The maximum length of a keyword, including hyphens in a multiple word entry, is 30 characters.
- Generally, keywords should be limited to one word terms (e.g., BRUISING SKINNING) or two word terms (e.g., BULK HANDLING CROP DAMAGE). Use of three word terms (e.g., PLANT DISEASE CONTROL) is acceptable but should be minimized.
- Phrases and sentences are unacceptable as keyword entries.
- Keywords may be chosen regardless of any overlap with classifications on Form AD-417. Subjects of investigation KAs may be reflected in the keywords, provided they emphasize, delineate, or define the nature of the study.

Signature Blocks

CRIS maintains a file of authorized signature designees. Electronically submitted forms are verified by policy of signed copies of AD-416/417 forms will be maintained at the originating organization for three years after termination of the project for audit purposes.

AD-417 Detailed Instructions

Form AD-417 - Research Work Unit/Project Description - Classification of Research

Reporting Instructions

Each field or data item on form AD 417 is identified by a number or name. These instructions are keyed to those numbers and names.

Field 25   Basic Research
Field 26   Applied Research
Field 27   Development Effort
Field 28   Forestry Percent
Field 29   Animal Health Percent
Fields 30-39   Classification by Knowledge Area, Subject of Investigation, and Field of Science
                Guide to Classification
                The Research Classification Scheme
                Multidimensional Classification
                Classification Percentages

Fields 25-27: Basic Research, Applied Research, Development Effort

Percentages entered in the three fields -- Basic Research, Applied Research and Development Effort -- must total 100. Enter whole numbers only. One project rarely contributes to all three fields.

Basic Research
Research that has a primary goal of gaining fuller knowledge or understanding of a subject.

Applied Research
Research that has a primary goal of the practical application of knowledge to meet a recognized need.

Development Effort
Research findings to produce useful materials, devices, systems, or methods.

Fields 28-29

Field 28: Forestry Percent

Field 29: Animal Health Percent

Enter the percentage for Forestry/Animal Health Component.

If the project is funded by McIntire-Stennis or Animal Health programs, the Forestry or Animal Health component will automatically be assigned 100%.

You can optionally assign percentages to these categories up to 100% each for projects funded by other sources.

Fields 30-39: Classification by Knowledge Area, Subject of Investigation, and Field of Science

Entering AD-417 Classification

The most important thing to remember about the AD-417 Classification process is the purpose of assigning these codes to your project: funding reports to Congress are based on this classification. In order to summarize funding in your area of research correctly, projects must be classified appropriately. Projects must be classified according to the Manual of Classification of Forestry and Agricultural Research.

Suggestions for completing the AD 417:

Enter the Classification by Knowledge Area (KA), Subject of Investigation, and Field of Science. You can complete the Classification table one of several different ways:

1. Using a printed manual or the online manual available at the CRIS Web site, determine which options apply to the project and enter the numeric codes and percentages in the table.

2. Use the column heading links at the CRIS Web Forms site to view the list of options and enter the appropriate numeric codes and percentages in the table. You may find it helpful to print a blank form to jot down your choices.

The Research Classification Scheme

All projects entered in CRIS must be classified to the classification elements without exception. In most cases, project classification on Form AD-417 is the responsibility of the organizational unit most closely identified with the research. The classification is described briefly below and is detailed in individual sections which follow. The classification elements consist of three series of broad classifications:

1. Knowledge Area (KA) (Table A)
2. Subject of Investigation (Table B)
3. Field of Science (Table C)

Each project in CRIS must be assigned at least one code from each of the three series of classifications. To allow for identification of multiple objectives of a research project, a maximum of ten (10) codes from each of the three series is permitted on a single project. Classifications are entered in fields 30-39 on Form AD-417.

Table A: Knowledge Area (KA) -- An important and highly useful series of research classifications is the classification by KA. The 79 KA's comprising the classification are arranged in nine topic areas. KA codes are entered in column 1.

Table B: Subject of Investigation -- This series provides an additional facet for research classification. It is generally the object of the research; e.g., the class of plant, animal, organism, material, process, procedure, etc., under investigation. Subject of Investigation codes are entered in column 2.

Table C: Field of Science -- This classification lists the disciplines involved in conducting the research. It consists essentially of a modified version of fields of science used by the National Science Foundation for various government wide reports. A number of disciplines were added by the CRIS Enhancement Committee in 1998. Field of Science codes are entered in column 3.

Multidimensional Classification

The selection of classification codes on individual projects is based on a three-part, multidimensional scheme which requires one code from each of the three series of classifications (KA, Subject of Investigation, and Field of Science) to be entered in the same field or line of classification on Form AD417.

Specifically, for each KA coded in column 1 in fields 30-39, there must be a corresponding code for Subject of Investigation in column 2, and Field of Science in column 3.

A maximum of ten (10) lines of classification is permitted on a single project.

Classification Percentages

In classifying projects, each line of classification must be assigned a percentage (weighted) to indicate the portion of effort on the project directed to each KA-Subject of Investigation-Field of Science combination.
Classification Procedure - Fields 30 - 39

Step 1. Selection of KA, Subject of Investigation, and Field of Science

- First, review the titles of the KA's and select the KA which best describes the project. Some projects may require more than one KA.

- Second, review the detailed description(s) of the KA(s) to confirm your selection.

- Then, for each KA you select, enter the KA code in the KA column (column 1). See Figure 1.

- For each KA in column 1, enter one or more Subject of Investigation codes in the Subject of Investigation column (column 2). If more than one Subject code is entered, then the corresponding KA code must be duplicated on the applicable line.

- For each KA-Subject of Investigation combination, enter one or more Field of Science codes in the Field of Science column (column 3). Enter the corresponding KA and Subject codes on the applicable lines if needed.

- Repeat Step 1 to enter additional KA's.

- See Figure 1 for an example of a partially completed classification table.

Figure 1 - Classification Table

Classification by Knowledge Area, Subject of Investigation, and Field of Science

	Knowledge Area	Subject of Investigation	Field of Science	Percent Effort
	Code (1)	Code (2)	Code (3)	% (4)
30.	203	1540	1080	50
31.	203	1550	1080	20
32.	211	1540	1080	20
33.	211	1550	1080	10
34.				
35.				
36.				
37.				
38.				
39.				

Step 2. Assignment of Percentages

- Percentages are assigned to each line of classification; that is, to each unique KA-Subject of Investigation-Field of Science combination. Percentages are assessments of time, money, and/or material, each expressed as a percent of the whole, which may be allotted to each listed combination.

- For projects containing only one line of classification, the percentage will always be 100. Otherwise, individual percentages will vary, depending on the number of lines of classification and relative weight given to each KA-Subject of Investigation-Field of Science combination.

- Percentages must be expressed as whole numbers, not as fractions or decimals, and each must be NOT less than 10 percent.

- When the individual percentages are correctly assigned, the sum of all percentages in column 4, fields 30 39, will equal 100.

- A maximum of ten (10) lines of classification is permitted on a single project.

AD-419 Detailed Instructions

AD419 - Research Funds and Staff Support

Process

The AD-419 is used to report Federal and State expenditures and unliquidated obligations, disbursements on grants and cooperative agreements, and staff support for individual research projects. Report all funding expenditures for project activities on the AD-419, regardless of the source. The reporting period is the Federal fiscal year -- October 1 through September 30.

AD-419 data are due at CRIS by February 1.

Request

To facilitate the reporting process, the request for the AD-419 report is sent out to each State partner organization after the end of the Federal Fiscal Year (by mid-October).

The AD-419 request letter is forwarded via email, along with the instructions for submission of the AD-419 report data.

Project Checklist

The AD-419 Project Checklist includes projects that were active within the fiscal year being reported. The Checklist is available for each State partner institution at the CRIS Web Forms site.

Consolidated CSREES OD-1088 Distribution of Appropriated Funds by Program

The OD-1088 report shows allocations of CSREES formula funds for the fiscal year, and is available from the CRIS Office in Excel format upon request.

National Summary of Non-Federal Institutions: Actual Funds and Scientist Years

This summary report shows data reported the previous fiscal year for comparison with the current year's data, and is available from the CRIS Office upon request.

General Reporting Information

Reporting Media

Data must be submitted electronically (Internet via CRIS Web Forms or Excel spreadsheet via email attachment). An Excel template is available from the CRIS Office upon request. Please note that comments should not be included on the Excel spreadsheet.

Each individual project requires a separate AD-419 report that includes each source of funds and type of staff support for the project. Do not submit total fields (231, 232, 233, 234, 350). Do not submit zero amounts or negative entries.

A summary AD-419 reflecting totals for each funding category and for each staff year category will be returned to the reporting organization for verification.

Data Update and Validation

AD-419 data are subject to a rigorous validation. Several verification reports are generated and any obvious problems will be corrected by the CRIS Staff. Other problems listed on the verification reports are forwarded to the reporting organization for clarification and reconciliation.

Revised data files will be accepted as necessary. Minor discrepancies can be addressed via email or telephone to provide adjustments to individual amounts.

AD-419 Reporting Requirements

If funds were expended on a project during any part of the fiscal year, an AD-419 report should be completed for the project if the total expenditure is at least $100.00. Do not submit reports where the total funds reported are less than $100.00.

Report expenditures and unliquidated obligations for formula funds (Hatch, Multistate, McIntire-Stennis, Evans-Allen, Animal Health) and disbursements for contracts, grants and cooperative agreements. Funds reported should be rounded to the nearest whole dollar amount.

Report only the portion of funds on a grant or cooperative agreement actually disbursed during the fiscal year. Do not report the face amount of a grant or cooperative agreement unless the entire amount was actually expended within the Federal fiscal year.

CSREES Administrative Projects

Funds and support years cannot be reported on CSREES Administrative projects and will not be accepted in CRIS. Administrative costs must be prorated to all appropriate research projects by the institution before posting AD-419 amounts for individual projects.

Typical Reporting Mistakes:

- Using negative amounts
- Not rounding to whole dollars
- Changing Excel template
- Duplicate project numbers
- Duplicate accession numbers
- Funds entered in incorrect/inappropriate field
- Accession number/station code mismatches
- Accession number/project number mismatches
- Field reported more than once for the same accession number
- Leading zeroes missing in accession number

Special Issues

The following procedures represent the CSREES preference and are the accepted current practice at most institutions for managing the indicated situation.

Indirect Costs for Grants and Cooperative Agreements

Funding for a portion of the research program at each institution comes from grants and cooperative agreements. Many grants include funds to cover indirect costs. Indirect-cost charges are intended to reimburse the institution for use of physical facilities; use of library facilities; and use of accounting, purchasing, and other central services not billed directly. They are usually considered legitimate expenses of research and can be charged to the grant or cooperative agreement. When charged to the grant or cooperative agreement these charges should be included in the amount reported on the AD-419. Refer to grant award documents for specific information regarding the reporting of indirect costs.

Employee Fringe Benefit Expenditures

The cost of employee benefits for all staff support reported on CRIS projects, as well as prorated administrative and contract service/support accounts, should be included as expenditures on the AD-419.

These include employer contributions for Social Security, retirement plans, health plans, group life and disability plans, and other payroll taxes paid by the employer.

If actual data for these expenditures are available from your institution, they should be included on the AD-419. If not, you may need to prorate the costs to all projects reported to CRIS.

In many States, employee benefit expenses are charged to a central institution or State pool, and actual expenditure data are not available. In theses cases, determine the average cost of employee benefits as a percentage of salary for your institution. Either obtain the figure from the central unit responsible for managing benefits, or use the rate that your institution suggests for developing grant applications. If neither is available then possibly check rates with peer institutions - and based on that information determine a reasonable rate to use in preparing your AD-419 amounts.

Once you have determined the rate as a percentage of salary costs, calculate the amount of employee benefit costs to be added to the AD-419 expenditures as follows:

example:

Total Salary Expenditures on the projects = $750,000
Employee Benefit Rate = 26%
Estimated Employee Benefits Expense = ($750,000 x .26) = $195,000

Prorate the *Estimated Employee Benefits Expense* to individual projects based on either total expenditures or salary expenditures using the most efficient method for your situation.

Grants and Sub-grants

When a CSREES awarded grant is split into one or more sub-grants, or passed though to another institution by the original recipient, the CSREES procedure for reporting funding and staff support data to CRIS is for the organization that was awarded the grant to aggregate the expenditures for all grant activities and submit a single consolidated AD-419 report for the grant. If sub-grant institutions submit AD-419 reports for their sub-grant project, CSREES administered funds should **NOT** be reported on the AD-419.

On the AD-419 report, the original recipient of the grant should report the expenditures of the grant funds in field 204.

Reporting Instructions

The AD-419 is a complex document so it is essential that instructions be followed closely. Each field or data item on the AD-419 is identified by a field number and field name. The instructions are keyed to the field numbers and names. Depending on the method of submitting AD-419 data, the entry of project identifiers may or may not be required.

Field 1	Accession Number
Field 2	Agency Identification
Field 3	Three- or four-character Institution Code
Field 5	Work Unit/Project Number
Field 7	Project Title
	Multistate Project Number
	Project Type
Field 201	Hatch funds
Field 202	Hatch Multistate funds
Field 203	McIntire-Stennis funds
Field 204	CSREES grant and cooperative agreement funds
Field 205	Evans-Allen Funds or Animal Health Funds
Fields 209, 219, 308-318	Other Federal Research Funds
Fields 220-223	Non-Federal Research Funds
Field 241	Scientist Support
Field 242	Professional Support
Field 243	Technical Support
	Entries must be reported to the nearest tenth of a person year.
	Administrative Projects
	The AD-419 vs the SF-269 and SF-272

Field 1: Accession Number

The accession number is the unique, seven-digit number assigned by CRIS. Zeros are padded to the left of the number to reach seven digits. Each project is identified by its own unique accession number.

 example: 0195620

Field 2: Agency Identification

The alphabetic/character agency abbreviation (identifier):

CSREES - Cooperative State Research, Education, and Extension Service - projects funded by CSREES sources

SAES - State Agricultural Experiment Station projects not participating in any CSREES administered program or award

OCI - Other Cooperating Institution - projects not funded by CSREES sources at 1890 Institutions, Tuskegee University, and forestry schools

CSVM - projects not funded by CSREES sources at Cooperating Schools of Veterinary Medicine

Field 3: Three- or four-character Institution Code

Institution codes with the following characters in the fourth position designate a specific type of organization or award:

X   1890 Institution or Tuskegee University
Y or Z   School of Forestry
V   School of Veterinary Medicine
K, R, or W   Public or private institution or a land-grant institution where the college or department of the principal investigator is not affiliated with the SAES, 1890/Tuskegee, Forestry, or Veterinary Schools.

- "K" used only with the Small Business Innovation Research Grant Program.
- "R" used only with the NRI Competitive Grants Program.
- "W" used only for CSREES-funded grants other than NRI Competitive Grants or Small Business Innovation Research Grants.

Field 5: Work Unit/Project Number

This number identifies the project as assigned and maintained in the records of the reporting institution.

The project number is prefixed with a variation of the three-or four-character institution code (field 3) to insure a unique identity across all stations.

Multistate Project Number (no field number)

The Multistate project number identifies projects supported by Multistate Research funds, or those formally on record as contributing to a Multistate research project. This number combines the region (NE, NC, S, W, NRSP, etc.) and the numeric portion of the project number.

Project Type (no field number)

Project types for CSREES funded projects are:

- Hatch
- Hatch Multistate
- McIntire-Stennis
- Animal Health
- Evans-Allen
- NRI grant
- Special grant
- Other grant
- Small Business Innovation grant
- Cooperative Agreement

Projects not funded by CSREES:

- Project Type = State

Rounding Funds and Staff Years

- Please submit funding data rounded to the nearest dollar.

- Staff support fields should be rounded to the nearest tenth of a staff year.

Fields 201-205: CSREES-Administered Federal Research Fund

Field 201 - Hatch funds
Field 202 - Hatch Multistate funds
Field 203 - McIntire-Stennis funds
Field 204 - CSREES grant and cooperative agreement funds
Field 205 - Evans-Allen Funds or Animal Health funds

Note: Fields 201 through 205 are mutually exclusive with the exception of 201/202 for approved Multistate projects.

Fields 209, 219, 308-318: Other Federal Research Funds

These fields are used for reporting Federal funds administered by Federal agencies other than CSREES, and for grants made by CSREES with pass-through funds from other agencies. Appropriate funding amounts should be entered in these fields corresponding to the source of the funds. These categories may be used by CSREES administered projects to report appropriate amounts for these fields making sure the correct CSREES administered amounts are reported in fields 201 - 205.

Field 219: USDA Contracts/Grants/Cooperative Agreements

Field 219 is for reporting funds received from contracts, grants, or cooperative agreements with USDA agencies other than CSREES. Do not use this field for any CSREES administered funds.

Fields 209 and 308-318: Other Federal Research Funds

These fields are for Federal departments or agencies outside the USDA that may finance work conducted by or for the reporting institution. If funds from some other Federal source not listed on the AD-419 are involved, or if reporting CSREES administered pass-through funds, enter the amount in field 318.

Field 318: CSREES Pass-Through Funds

These are funds received by CSREES from other Federal agencies, such as the Department of Energy, Department of Defense, or other USDA agencies, through interagency agreements. These funds are distributed through grants and cooperative agreements to non-federal institutions. Since these funds were not appropriated to CSREES, they should not be reported in fields 201 - 205. Expenditures of CSREES pass-through funds should be reported in field 318.

Fields 220-223: Non-Federal Research Funds

These categories may be used by CSREES administered projects to report appropriate amounts for the indicated fields.   Funds should be entered in these fields corresponding to the source. Do not use these fields to report any CSREES administered funds.

- **Field 220** is for State appropriations.

- **Field 221** is for funds expended from self-generating accounts, such as the sale of products, royalties, or interest.

- **Field 222** is for funds from contracts, grants, or agreements to the institution or grantee by industrial organizations, corporations, commodity commissions, and firms; for example, grants from food processors, manufacturers of containers, chemicals, machinery, equipment and fertilizer, transportation companies, and power companies.

- **Field 223** is for funds from any other non-federal source not included in 220, 221, or 222 such as local governments, professional societies, individuals, banks, etc.

Fields 241-244: Non-Federally Employed Staff Support

Field 241: Scientist Support

A scientist is a research worker responsible for original thought, judgments, and accomplishments in independent scientific study. This includes the investigation leaders, project leaders, and portions of the time of supervising scientists or staff assistants whose work meets the preceding definitions. Generally, the individual holds an academic rank of assistant professor or above and is capable of holding principal investigator status at the reporting institution. Outstanding graduate students with sound backgrounds of professional accomplishments may thoroughly merit the responsibilities of a scientist. However, most graduate students are rated as professional support.

Administrative staff should be excluded unless they meet these requirements and are active participants in the actual research of the project. It is important to report scientist years accurately, because this category is frequently used in decision making.

Job titles for scientists include:
- professor
- associate professor
- assistant professor
- distinguished professor
- scientist

Field 242: Professional Support

A professional does not qualify as a scientist under the preceding definition, but nevertheless contributes to research activities. Professionals usually hold one or more college degrees, and have otherwise qualified for employment in a professional category. A few may hold a Ph.D. or equivalent degree, and may be in a high-level academic position, but nonetheless may be categorized as a research assistant or research support rather than as a research scientist. Graduate students may be categorized as professionals. Generally, professionals have a high degree of research-activity responsibility but do not hold principal investigator status at the reporting institution.

Job titles for professional support include:
- administrative assistant
- associate director
- department head
- instructor
- research associate
- resident director
- statistician
- programmer
- analyst
- director
- assistant director
- graduate assistant
- research assistant
- research specialist
- post doctoral fellow
- visiting professor
- fiscal officer
- editor

Field 243: Technical Support

Technical Support staff are associated with research efforts in a technical capacity and do not participate in the investigative aspects of the research.

Job titles for technical support include:
- laboratory assistant
- mechanic
- laboratory technician
- draftsman
- research technologist
- farm foreman
- carpenter
- machinist
- skilled tradesperson

Field 244: Clerical, Labor, and Other Support

Generally, clerical support staff and other non-research staff contribute to the nontechnical support of the research project. It may be difficult to accurately assess an individual's clerical and labor support to any one project. Staff support members assist a group of researchers in a broad manner, such as a typing pool might support a group of investigators in a department or school.

Job titles for clerical and labor include:
- administrative secretary
- maintenance repairman

- clerk
- farm technician
- typist
- stenographer
- farm worker
- data entry
- secretary

Entries

Entries must be reported to the nearest tenth of a person year.

- If staff members within a single category or field collectively account for less than 0.05 staff year on a project, make no entry for that category for that project. Enter staff estimates from 0.05 to 0.14 staff years as 0.1; enter 0.15 through 0.24 as 0.2, etc. Entries should be realistic.

    For example, if it costs your institution approximately $150,000 to $200,000 to provide 1.0 scientist year of research effort, do not enter 0.1 scientist year in field 241 for a $2000 to $3000 obligation.

- All entries should represent the fraction of a staff's time actually spent on research-related projects.

    For example, if a scientist's effort is split between teaching (40 percent) and research (60 percent) duties, the total reported research effort for all research projects conducted by this scientist should total 0.6 scientist years. All support should be made on a twelve-month basis. Appropriate adjustments should be made for staff on nine- month appointments, graduate students on quarter-, half-, or three-quarter research appointments, personnel employed less than a full year due to termination or initiation of employment, and other factors influencing the total effort reported.

Administrative Projects

Documentation of administrative projects is not required for federally funded programs administered by CSREES, but if administrative projects are documented they are identified by a single AD-417 classification code line. The classification line will consist of 001 for Knowledge Area, 0001 for Subject of Investigation, and 0001 for Field of Science. Do not submit an AD-419 for administrative projects. Instead, prorate administrative costs to all appropriate research projects: McIntire-Stennis research administrative funds to McIntire-Stennis research projects; Hatch administrative funds to Hatch projects, etc. Prorate all administrative staff support (fields 241-244) to appropriate research projects. Even though charges to CSREES approved administrative projects are prorated back to the appropriate research projects in the CRIS system, you must be able to document charges to the approved administrative projects at your institution for audit purposes.

Administrative and Central Service/Support Expenditures

It is important that all related administrative and general support costs be included on the AD-419 to provide consistent data that accurately reflect the total funding and effort expended in support of agriculture and forestry research. Administrative and support costs are not separately reportable in the CRIS system but must be prorated to applicable CRIS projects.

Administrative Costs are centralized for administering the research programs conducted at State and other non-Federal institutions. Costs can include salaries, wages, employee benefits, goods and services, travel, equipment, or other allowable costs.

Support Costs are general costs of research and auxiliary activities not directly attributed to specific projects. Examples are costs of maintaining plots when not being used for research, and general costs of maintaining dairy, beef, and swine herds, or flocks of poultry for research. Include and prorate generalized farm operational costs, maintenance costs for plant growth and greenhouse facilities, computer and statistical support departments, and other service units.

When budgeting, you are encouraged to allocate as much as possible to the research projects, thereby minimizing the amounts budgeted to and expended for administrative and support activities.

Procedures for Prorating Administrative and Central Service/Support Expenditures

Administrative and central service/support expenditures may be prorated back to regular research projects by computing an adjustment factor for each AD-419 financial field. These factors are then used to adjust

the original AD-419 entries. If staff years are reported under administrative or central support projects, they should also be prorated using the same factors.

This procedure is not required, but represents a straightforward approach. Depending upon the amount of time and resources available, States may wish to prorate administrative costs for running the research director's office to all projects; prorate department administrative costs only to projects within the department; and prorate support costs to the various user projects (for example, cost of maintaining dairy herd to all dairy projects). Regardless of approach, you must also use the same process to prorate staff years utilized in administrative and centralized support categories to CRIS projects.

The AD419 vs the SF-269 and SF-272

- The **AD-419** is a research fund and staff support document used to report Federal and State expenditures, unliquidated obligations, and disbursements on grants and cooperative agreements by research project.

- The **SF-269** is a financial status document used to report outlays and unliquidated obligations on CSREES formula- funded programs.

- The **SF-272** is a financial status document used to report quarterly disbursements on CSREES grants, cooperative agreements, and formula-funded programs.

The AD-419 is used for research planning and is not an auditable document. The SF-269 and SF-272 are official fund accountability documents and are used for audit purposes.

You are encouraged to report all non-Federal funds obligated on the SF-269, including the excess matching requirements for each program; however, reporting non-Federal funds in excess of the matching requirements is not mandatory.

Report all funding expenditures for research, regardless of source on the AD-419. This is to insure complete and accurate data are available to the Federal and non-federal partnership for program planning, program management, and budget decisions. The totals for formula-funded programs on the AD-419 should be equal to the total Federal share of outlays and unliquidated obligations on the SF-269. AD-419 reports for grants and cooperative agreements should be equal to the total net disbursements reported on the SF-272 during the fiscal year.

AD-421 Detailed Instructions

Form AD-421 - Progress/Termination Report

Importance of Progress Report Data

CRIS progress reports (forms AD-421) are widely used by scientists, administrators, State and Federal officials, and legislative offices. The CRIS technical database is available online to the public worldwide via the CRIS Web site at: http://cris.csrees.usda.gov/

The quality and timeliness of the AD-421 report reflects strongly on the research, the investigator(s), and the reporting organization, and can have a significant influence on State and Federal funding decisions affecting research.

The AD-421 report includes progress, McIntire-Stennis Graduate Student Years (GSY), impact, and publications.

Reporting Instructions

AD-421 Progress/Termination Reports must be prepared and submitted via the CRIS Web Forms site: http://cwf.uvm.edu/cris/

The AD-421 report is used for reporting annual progress on active research projects and summary reports for terminated (completed) projects.

Progress reports are requested annually in the month of October. State partner organizations have the option of reporting annual progress reports on either the calendar year or the Federal fiscal year. Calendar year reports are due on April 1 of the following year; Federal fiscal year reports are due on February 1 of the following year.

Progress/Final Technical Reports for CSREES-funded Grant Projects

Final summary reports for terminated grants are due within 90 days after the specified termination date. Grantees are notified when final technical reports are due.

Please refer to the grant "terms and conditions" for specific guidance with regard to the submission of progress/termination reports.

Termination Reports

Be sure to select or mark "termination report" to insure that the project is properly identified for termination in CRIS. *Do not mark "termination report" if the project is to be extended or revised.*

Period Covered

For annual progress reports, the reporting period dates should cover the period during the calendar year or Federal fiscal year when the research was in progress.

- Progress reports should be reported on an approximate one-year basis.

- For termination reports, the dates should reflect the time frame (start and termination dates) for the life of the project.

Progress Report Content

The AD-421 Progress Report should summarize significant findings, results, accomplishments, conclusions, and recommendations, and the explanations or reasons why these are meaningful. If conclusions and recommendations are not available, report the present stage of achievements. Statements must be appropriate to appear without change in published sources. Do not exceed 3200 characters, including punctuation and spaces.

Patents and Inventions: Disclosure statements should be made via the annual CRIS form AD-421 Progress report. If applicable, enter the following information at the end of the progress report.

1. If a patent has already been issued, provide the patent number and the issue date.

2. If a patent has been applied for but not yet issued, provide the patent application serial number and the filing date.

3. If disclosure information has not been submitted in a prior report, please include on the current report.

Graduate Student Years

For McIntire-Stennis projects, enter the number of Graduate Student Years (GSY) associated with the project based on one year.

examples: 1.0   0.5

This information is used to conduct analyses based on graduate student support relative to McIntire-Stennis funding.

Impact

Provide a brief non-technical summary of the expected impact of this research in 1600 characters or less (including punctuation and spaces).   Summarize the project's economic, environmental, and/or social IMPACT. Use full sentences and non-technical language. Impact statements should answer the questions, "What difference does it make and to whom? and What's the benefit?"

examples:

EXAMPLE A.   House flies and stable flies are insects of great medical and veterinary importance. Studies on the microbial ecology of house flies may lead to the development of novel control strategies for these insect pests. Analysis of antibiotic resistance of enterococci will offer new insights into the role of house flies in the ecology of antibiotic resistance genes. Stable flies are the most important insect pests of cattle on pastures in the United States. Currently, there are no effective methods for management of stable flies in this environment. Boric acid appears to be a very effective management tool for stable fly larvae developing on pastures.

EXAMPLE B.   This research documents that selection can be used to develop ewes that are capable of rebreeding while lactating in spring. Access to such animals is required to make systems of accelerated lambing (e.g., the production of three lambs crops every 2 years) practical. The current results also further documents that ewes in this selection line appear to have a strongly abbreviated seasonal anestrus and may serve as a model for further study of genetic factors controlling seasonality in sheep and other species. Testing of various hair sheep crossbred types will provide information on strategies to develop "easy-care" sheep germplasm in order to reduce costs of lamb production.

Publications

List significant publications issued during the progress report period. You must include, in this order: (1) the authors names, (last name and initials as in the example); (2) the 4-digit year of publication; (3) the title of the work; (4) the location of the information (e.g., Mycol. Soc. Amer. 41(1):24).

example:

Wu, J., and A. J. Plantinga. 2003. The Influence of Public Open Space on Urban Spatial Structure. Journal of Environmental Economics and Management 46(2):288-309.

Do not number the publications. Do not enter the authors in all capital letters. Citations are not limited in length or number, but MUST be separated by a blank line and must include the year of acceptance or publication! Include only publications that have not been submitted previously. If there are no new publications for the reporting period, leave this field blank