

TECHNOLOGY

TRANSFER

HANDBOOK

FOR ARS

PLANT

BREEDERS

AUGUST 2011

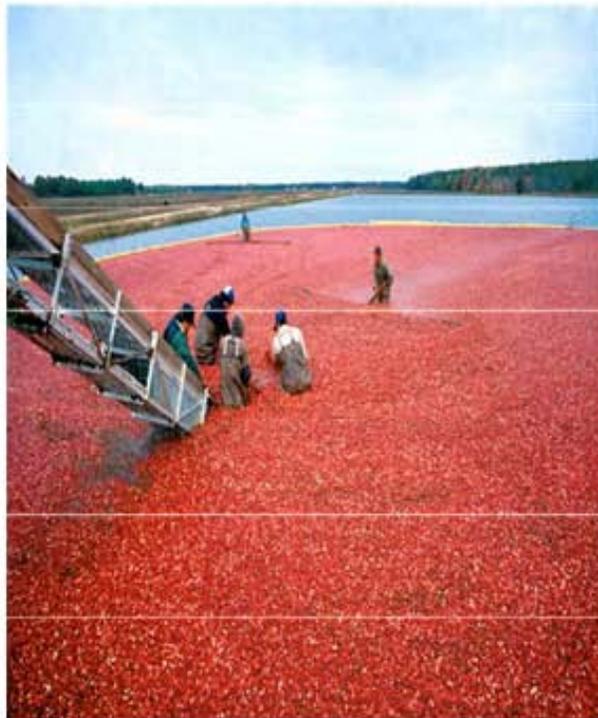


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Handbook for ARS Plant Breeders

Preface

ARS scientists have a long and successful history of genetic improvement of plants. For some crops, ARS conducts varietal development programs. For other crops, ARS researchers produce superior breeding lines that are used by public and private plant breeders to make new varieties. ARS also develops and maintains breeding populations and genetic stocks. All these research and developmental activities may be carried out solely by ARS or in partnership with Land Grant Colleges and Universities, State Agricultural Experiment Stations (AES) or the private sector.

For ARS plant genetic improvement research to have an impact, the outputs from these activities must be transferred to users outside of ARS. Historically, this has been accomplished through public release of germplasm or varieties. In more recent years, as the national and international context of plant breeding has changed, ARS has elected to use technology transfer agreements or obtain intellectual property (IP) (This applies to patented materials as well as to those materials protected by Plant Variety Protection Certificates (PVPC) or those publicly released without IP protection rights on some varieties as a means of enhancing technology transfer.

It is ARS policy to make all new varieties and enhanced germplasm widely available to breeders throughout the world for research and developing new varieties. This applies to patented materials as well as to those materials protected by Plant Variety Protection Certificates (PVPC) or those publicly released without IP protection.

What is the purpose of this handbook?

This handbook is designed to help ARS plant breeders manage the new complexities of technology transfer of plant germplasm including new varieties, breeding lines, genetic stocks and mapping populations. It does not address the receipt or disposition of germplasm from the National Plant Germplasm System.

What is the current ARS policy on release of plant germplasm?

ARS plant breeding programs are a very significant part of ARS' total research program with 731 new varieties and 2,987 germplasm lines having been introduced since May 1980.

ARS policy to publicly release new varieties and enhanced germplasm lines without IP protection has changed over the years. Exceptions to this policy for certain ARS developed or co-developed varieties may be made on a case-by-case basis, if this is in the best interest of technology transfer and supports the needs of ARS customers and stakeholders. ARS has developed a process for making these decisions, which is described in this handbook.

SECTION 1 - Developing and Releasing Germplasm

Who decides when germplasm is ready to release?

It is the primary responsibility of the individual ARS plant breeder to decide whether the material he/she has developed is ready for release. The main criteria for release are:

- the material represents a useful advance in genetic resources,
- the material has been adequately evaluated,
- and, the material offer benefits to users.

Breeders must discuss with their Research Leader (RL) whether germplasm meets these criteria. The decision to release is then discussed with the appropriate National Program Leader (NPL). The final decision rests with the ONP Deputy Administrator, Plant Production and Protection. A list of NPLs for ARS plant breeding projects can be found at <http://www.ars.usda.gov/pandp/locations/NPSLocation.htm?modecode=02-06-00-00>

Should ARS scientist arrange to have germplasm evaluated by entities outside of ARS?

According to accepted standards, ARS encourages the thorough evaluation of germplasm prior to release. This helps ensure genetic stability and quality. If you are working with a university cooperator, this individual usually arranges for evaluation of the germplasm by the university on university property. For some crops, ARS participates in formal regional evaluations.

The ARS breeder should check with their Technology Transfer Coordinator (TTC) in their Area Office to ensure there is an existing agreement, which covers the evaluation of the germplasm. If you wish to have germplasm tested or evaluated without an existing extramural agreement, you must execute a Material Transfer Agreement (MTA), a Plant Testing Agreement, or some other form of agreement. Your TTC will advise you on this. A list of ARS TTCs can be found at <http://www.ars.usda.gov/business/docs.htm?docid=763&page=3>

Is it okay to exchange unselected or early stage plant materials with other breeders for evaluation?

This must be determined on a case-by-case basis. For many plants, this is a longstanding tradition that benefits public breeding programs. However, there may be downstream ramifications of such exchanges that are difficult to assess. Before initiating such an exchange, discuss it with your RL and NPL. Such exchanges **MUST** be documented by a formal agreement. Consult with your TTC before proceeding. Exchanges with non-public entities require additional scrutiny.

Is it okay to exchange unreleased germplasm with others for breeding?

This must be determined on a case-by-case basis. Because there will be downstream ramifications of using unreleased germplasm, exchanges **MUST** be documented by a formal agreement, such as a SMTA or Breeding-MTA. Both the SMTA and breeding MAT require ONP approval before proceeding. Consult with your RL, NPL and TTC before proceeding.

Is it okay to utilize proprietary germplasm in an ARS breeding program?

This must be determined on a case-by-case basis. There will be downstream ramifications of using proprietary germplasm in breeding which will normally preclude a public release. Breeding with proprietary germplasm **REQUIRES** a formal agreement. Consult with your RL, NPL and TTC before proceeding.

A CRADA to help develop germplasm or a new variety?

This must be determined on a case-by-case basis. A Cooperative Research and Development Agreement (CRADA) obligate USDA to negotiate an exclusive license to IP resulting from the agreement. ARS reviews each CRADA opportunity carefully. If you are interested in developing a CRADA, contact your RL, NPL, and TTC before proceeding.

Do ARS scientists need to deposit the new plant materials in the National Plant Germplasm System?

To ensure that improved plant material is readily available to others, all newly released varieties and germplasm lines are to be entered into the NPGS, if it maintains that species. ARS scientists releasing plant material are to make appropriate deposits in seed or clonal repositories.

If the germplasm is co-developed with a university or AES, is it OKAY to submit the proposed release through the university's plant release committee?

Yes. If appropriate, it is encouraged to submit potential releases to these committees for evaluation because they may provide useful information and input. However, their decisions are not binding on ARS. After consideration by the university committee, you **MUST** enter the germplasm in the Plant Material Docket of the Licensing/Invention Section of the Agricultural Research Information System (ARIS) described below.

Can ARS scientist serve on a university release committee?

Yes, with your supervisor's approval you may serve on a university release committee as part of your official duties. However, you may not vote on any fiduciary matter of the university, including development or exploitation of IP, nor may you commit ARS to any particular action. Your role should be purely technical. Consult the Area Ethics Advisor for clarification on roles and responsibilities, and to ensure this outside activity has been properly documented.

SECTION 2 - Preparing the Release Notice How do I prepare a release notice?

There are two different kinds of release notices. The first is when ARS has the lead (ARS initiated the concept and assumed leadership for the development of the plant material) and the second is when ARS cooperators have the lead. Sample release notices. Can be viewed at (need URL here)

Guidelines when ARS has the Lead

Heading

ARS should be listed first if there are cooperators and the opening sentence should be written as shown in the attached samples.

Naming of Varieties and Designations for Germplasm Lines

The ARS Deputy Administrator, Plant Protection and Production, must approve all variety names or germplasm line designations as part of the regular clearance process, but those names selected by the plant breeder are generally accepted. In preparing the notice, if desired, the term “cultivar” may be used instead of the term “variety.” If a new variety is to be named after a living person, the individual must give written permission.

When a variety name is to be used, the scientist should conduct a trademark search through the US Patent and Trademark Office (USPTO) website to make sure the proposed name has not been trademarked. The trademark database is found at the USPTO web site (www.uspto.gov). Look for “Trademarks” on the left side menu then “Search Trademarks” for existing trademarks. If a cooperator or a prospective licensee is considering trade marking the new ARS plant variety, the breeder may consider using a numerical designation, rather than a name. This is because a variety name cannot be trademarked. For more information, contact your TTC.

Recognition of Individuals in Release Notices

Recognition of all individuals responsible for the development of new varieties or germplasm lines is required.

Origin and Description of Plant Material

The listing of parental material and a proper description of the plant material to be released are required. A statement of disease status also must be included, as appropriate for that plant species. The reason for release, along with any recognized deficiencies, should be clearly stated.

Use of Scientific Names

Scientific names are generally not needed for common plant species, diseases, insects, or nematodes. However, scientific names should be used when necessary for reader clarity and understanding. Check with the Germplasm Resources Information Network (GRIN) for the appropriate scientific name. (Need URL here)

Units of Measure

Units of measure are to be in the metric system. If desired, the equivalent English system may be shown in parentheses.

Abbreviations

Except for prescribed abbreviations for states in addresses, abbreviations (% , C, mm, g, etc.) are not to be used.

Tables and Graphs

If tables and/or graphs are considered necessary to accompany a release notice, they should be shown as an attachment rather than being included in the body of the release notice. The attachment should be sent via e-mail to the lead NPL with a copy to the ONP Secretary.

Literature Citations

Literature citations are not to be used in release notices. Release notices should be written so that the reader will not have to refer to publications for information on the plant material being released.

Requests for Plant Material

Because ARS Plant Breeders do not usually make distribution of introduced plant material directly to the public, it should be clearly stated who can request seed or propagating material of the new variety or germplasm line in question. Most materials are made available through the National Plant Germplasm System (NPES). The name and address of the individual or organization handling distribution of plant material should be clearly stated. Any limitations on the quantity of available plant material should also be clearly stated.

Request for Recognition of Source

ARS would like (but cannot demand) acknowledgement when our plant germplasm are used to advance agriculture. The following or similar statement should be added to the last paragraph of all releases of germplasm lines, "It is requested that appropriate recognition be made if this germplasm contributes to the development of a new breeding line or variety/cultivar."

Deposits in the National Plant Germplasm System

The following statements is to be included in the last paragraph of each new release notice if appropriate, "Genetic material of this release will be deposited in the National Plant Germplasm System where it will be available for research purposes, including development and commercialization of new varieties/cultivars."

Date of Release

If a date of release of plant material is needed or desired, state that it will be the date of final signature. Release notices are not official until final signature in the Plant Material Docket of ARIS.

Length and Style

Most plant release notices are no longer than two pages but they can be as long as necessary to

properly describe the plant material being released.

IP Protection

If ARS has filed or intends to file an application for a US Plant Patent or a Plant Variety Protection Certificate, a sentence indicating this must be added to the bottom of the release notice.

Signature Blocks

Signature blocks are no longer necessary because signatures are recorded electronically in the ARIS system described below. No release is considered final until all signatures in ARIS are complete.

Guidelines when an ARS Cooperator has the lead

ARS does not attempt to dictate style or format of release notices when ARS cooperators have the lead. However, the release notice should contain all pertinent information expected to be found in an ARS release.

Who reviews the release notice?

Your RL and NPL must review the draft release notice. E-mail the text of the release notice and any accompanying graphs and charts to your RL and NPL for comment.

Approval of the release notice

Once the RL and NPL comments have been incorporated in the revised release notice, it **MUST** be entered into the Plant Material Docket of ARIS.

SECTION 3- Entering Your Release in ARIS How to use the ARIS system?

After the draft release notice has received preliminary approval from the TTC, RL and NPL by e-mail, it should be entered into the Plant Material Docket of ARIS. Step-by-step instructions for this can be viewed at (URL needed here). To aid unit secretaries in entering the information into ARIS, the scientist should complete the ARIS Plant Material Docket Template. Can be viewed at (URL needed here)

Each cultivar of finished variety must be entered separately into the Plant Materials Docket of ARIS. However, one or more breeding lines (enhanced germplasm) line or genetic stocks may be released in a single release notice. Indicate this in the “Variety Name or Germplasm Designation” section by giving the general name of the germplasm and inserting “Multiple release--see comments.” In the comments section list the names of all the germplasm covered in the release.

Why can't the charts and graphs in a release notice be entered in the ARIS system?

ARIS cannot easily accept charts and graphs that are part of release notices. Send charts and graphs separately in an e-mail to your RL, Area Director and NPL indicating that these are part of a release notice you are inputting into ARIS Plant Materials Docket. In the comments section of ARIS, note that charts or graphs have been sent separately.

What happens to a release once it is entered?

Once your unit secretary enters your information in the ARIS Plant Material Docket, it moves electronically through your RL and Area Office to the National Program Staff (NPS) for approval.

There it is reviewed by the NPL for your ARS Project. Once all these levels have approved the release, the ONP Deputy Administrator, Crop Production and Protection will sign it, UNLESS there is request for patent of PVP protection.

Patents & PVP

If the answer is "yes" to the question regarding seeking a PVPC or Plant Patent, the release is sent to the ARS Plant Variety Protection (PVP) Committee. The PVP Committee is described below. The PVP committee does not review whether the germplasm should be released. The Committee discusses the most appropriate mechanism for its release. After the committee has reached a decision, the release is returned to the ONP Deputy Administrator for signature. If the committee recommends IP protection be pursued, it is then routed electronically to the OTT Deputy Assistant Administrator, and Office of Technology Transfer (OTT) for final signature.

How to know when approved?

You may track your release in the Plant Material Docket by checking its status in ARIS.

What happens if it is a joint release with a cooperator?

If ARS is making a joint release with a cooperator and taking the lead in the release, then NPS will send it to each of the cooperating institutions for signature. The NPS secretary, will track this process. Once all parties have signed the release notice, it will be returned to you, with a copy sent to the Area Director.

If ARS is not the lead institution, but wants to join in a release, should it be entered enter it into ARIS?

Yes. Ask the cooperating institution to send the release notice to you and then enter it into the ARIS Plant Material Docket as described above. State in the comment section, ARS is not the lead institution. Send the hard copy of the release notice to NPS secretary. If

the Area Office receives a hard copy of a release notice that has not been entered into ARIS, they should send you a copy to enter it into ARIS. Send the original to the NPS secretary.

Do ARS Scientists enter a new plant variety that is a CRADA invention in ARIS?

Yes. Follow the steps listed above; checking the box indicating that the release is a CRADA Subject Invention. Also, answer yes to the question ““Is this plant material a candidate for variety protection (PVPC and/or Plant Patent)?”

SECTION 4 -Obtaining Intellectual Property Rights for Plant Varieties

If interested in obtaining IP protection for a new variety?

If you believe a new variety may be a candidate for a Plant Variety Protection Certificate, a Plant Patent, and/or for foreign protection, answer “yes” in ARIS box that queries “Is this plant material a candidate for variety protection (PVPC and/or Plant Patent)?” Any person who reviews your ARIS entry may also change the answer to this query to “yes.” If you are unsure, answer “yes.” This will flag your variety for discussion by the ARS Plant Variety Protection Committee (PVP) described below. If you answer “yes” you will be prompted by ARIS to answer a number of questions, which provide information to help the Committee make a recommendation about IP protection.

What if interested in obtaining a PVPC so the variety will be grown only as Certified Seed, but intend to make a public release?

Currently the ARIS Plant Material Docket does not have a box for this choice. Answer “yes” to the question noted above, and add to the comments section a note indicating you are interested in obtaining a PVPC only for the purposes of seed certification.

How to gather information to help answer the ARIS Plant Material Docket questions?

If you believe IP protection may be indicated for your new variety, you should discuss this with your TTC, cooperators, stakeholders, and customers. Try to gather information and understand why they believe IP protection would or would not be beneficial. Do not make any commitments on behalf of ARS. You are encouraged to share the information in this handbook with cooperators, stakeholders, and customers so that they may understand the ARS process.

What types of IP Protection are available for plants?

There are many forms of IP available for the protection of plants and plant materials. If it is decided by ARS that IP Protection is desired, it is ARS policy to seek either a Plant Variety Protection Certificate (PVPC) (Seed) or a U.S. Plant Patent ([for more information on PVPC and plant Patents see p.14](#)). ARS does not normally seek utility patent protection on new varieties. A PVPC is

issued by the U.S. Department of Agriculture (USDA) Office of Plant Variety Protection Office (PVPO) as authorized by the Plant Variety Protection Act (7 U.S.C. §§2321 et.seq.) This Act may be downloaded from the PVPO website, <http://www.ams.usda.gov/science/PVPO>. A U.S. Plant Patent is issued by the U.S. Patent and Trademark Office (USPTO) as authorized by the Plant Patent Act 35U.S.C. §§161-164. Information on Plant Patents may be obtained from the ARS Patent Advisor. A list of ARS Patent Advisors is attached as part of Appendix 1.

A utility patent on plant materials?

Although it is possible in certain cases to obtain utility patents on new varieties and breeding lines, ARS policy does not usually seek this type of protection. It is ARS policy to make all new varieties and enhanced germplasm widely available to breeders throughout the world for the purpose of developing new varieties. Normally, there is no reason to seek a utility patent to restrict breeding on new varieties or breeding lines.

What is the difference between a PVPC and Plant Patent?

There are many legal differences between these types of IP. In addition to other legal differences, a PVPC is used to protect a sexually (seed) reproducing plant, a tuber propagated plant, or F1 hybrids of a sexually reproducing plant. To obtain a PVPC, a variety must be new (for most plants this means publicly available for less than one year in the US and less than four years in a foreign country), clearly distinct from all other varieties, uniform, and stable. Wheat, corn, cotton, and potatoes are examples of crops that can be protected by a PVPC.

A US Plant Patent is used to protect a single plant (and its parts) having a common characteristic and its clones. The plant must be asexually reproducing, new and distinct. It is ARS policy that ARS patented plant varieties be made available for breeding. Grapes, oranges, and roses are examples of plants that can be protected by a U.S. Plant Patent.

How about foreign IP protection?

There is no such thing as a worldwide Plant Patent or PVPC. Instead, each country has its own system of IP protection. Many countries issue Plant Breeders' Rights (PBR), which conform to the International Union for Protection of New Plant Varieties (UPOV). ARS enhanced germplasm which is publically released should be made available to all international breeders. In certain cases, ARS will seek PBR for some protected varieties in specific countries. This decision is made by OTT based on licensing interest. Thus, you do not need to fill in the International PBR tab in the Plant Material Docket of ARIS. If you believe there is a need for foreign protection of a new cultivar/finished variety, please discuss this with your TTC and indicate it in the comment section of the ARIS Plant Material Docket.

What about newly cloned plant genes or cloned genetic markers?

These types of inventions are outside the scope of this handbook. Consult your ARS Patent Advisor.

Who owns the new variety or germplasm lines produced?

Your plant materials are the tangible property of the U.S. Government. You should not distribute them without authorization. If you leave ARS, you must leave these materials behind.

If ARS obtains IP rights on a variety you develop, you are required to assign these rights to the U.S. Government as represented by the Secretary of Agriculture. In the case of a PVPC, see the section below regarding filling out the PVPC application. In the case of a US Plant Patent, the ARS Patent Advisor will provide assignment forms you must sign.

What if the plant variety is developed with a cooperator?

Determining if a cooperator is a co-owner of plant materials is a legal determination made by OTT. You will be consulted in making this determination. Generally, for a cooperator to be a co-owner, a cooperator's employee must be a co-breeder of a new variety, someone who has made an intellectual contribution to the development of the new plant variety.

If a university or Agricultural Experiment Station joins ARS in a release, does that mean they are a co-owner?

Not necessarily. A university or AES may join in a release because its employees have tested a new variety, provided physical resources such as greenhouse space, or because a state crop improvement association may wish to play a role in propagation and distribution. These types of activities do not constitute "breeding." Thus the cooperator would not be a co-owner. Co-ownership is a legal determination made by OTT on a case-by-case basis.

Does the ARS breeder get to decide if IP Protection is needed?

No. The ARS breeder may make a recommendation about seeking or not seeking IP protection in the ARIS Plant Material Docket. This is an Agency decision, which is made through the process described below.

Who decides if ARS should seek IP protection on a new variety?

The Plant Variety Protection Committee (PVP) described below receives each ARIS Plant Material Docket entry where the box asking if a PVPC or a Plant Patent should be considered is marked "Yes." Except for CRADA inventions, which are approved for IP protection without PVIP committee review. Varieties may be referred to the PVIP committee at the request of NPS or OTT. The Committee makes a recommendation to the ONP Deputy Administrator, Plant Production and Protection, and to the Assistant Administrator, OTT, who makes the final decision.

What is the PVIP Committee and how does it work?

The Plant Variety Intellectual Property Committee (PVIP) is co-chaired by a member of ONP,

NPL, and the Deputy Assistant Administrator of OTT. The Licensing Coordinator, OTT, is a permanent member of the committee. The remainder of the voting committee members, change depending on the variety being considered. The remaining voting members are the TTC, RL, Area Director (or his/her designee), NPL, and the Patent Advisor (if it is a patentable crop). The committee works by consensus. All members must agree that IP protection is desirable.

When does the PVIP meet?

The committee meets quarterly or as needed by teleconference.

What is the role of the breeder in the PVIP committee process?

The breeder will be invited to address the committee and asked to present their variety for discussion. This includes describing the variety and its advantages over existing varieties. The breeder will be asked to explicitly address the questions, which are part of the ARIS Plant Materials Docket. These are designed to provide relevant information to the committee members. The questions are:

How will scientist know what the committee decides?

The committee will issue a memo stating its recommendation. You will receive an e-mail copy of this memo. Possible decisions of the committee are:

- Defer a decision until more information is obtained. The committee will send a memo to the breeder identifying exactly what type of information is needed, OR
- Recommend filing a Plant Patent or PVPC Application and Licensing, OR
- Recommend for PVPC and public release by university partner, OR
- Recommend public release

The committee may also:

- Recommend for filing for Plant Breeder's Rights and list the countries of interest.

If the committee recommends that the variety be protected by a US plant patent, how will this be handled?

If the committee recommends that the new variety be protected by a US Plant Patent, the case will be automatically sent to the docket of an ARS Patent Advisor. You will be informed of this by e-mail. The ARS Patent Advisor will contact you to discuss the data requirements for a plant patent. A list of information generally required for a plant patent is attached as Appendix 6. There is no need for additional review by an ARS patent committee.

If the variety is co-owned, the Patent Advisor will coordinate the patent application process with the co-owner. When the Patent Advisor begins working on the case, they will contact you and ask you for the information needed to prepare the patent application. The Patent Advisor will prepare the

application and submit it to the USPTO. Your research unit must pay for the filing fee. The Patent Advisor will prosecute the case and keep track of the responses from the USPTO. When the patent is issued (which can take as long as several years), you will be informed in writing.

What happens if the committee recommends the variety is protected by a PVPC?

You will need to prepare the PVPC application. Download the application from the PVPO website: <http://www.ams.usda.gov/science/PVPO/PVP> and read the instructions carefully. You will need to use very specific language regarding ownership in blocks (1) (10) and on Exhibit E & F. Samples of how to fill out these blocks and Exhibit E & F for ARS solely-owned and jointly-owned varieties are attached as Appendix 5. If you have trouble filling in the form electronically, you may fill it in legible hand printing and OTT will enter the information for you. For assistance, please contact Tom Moreland at Thomas.Moreland@ars.usda.gov.

Do not sign the form. Only Rick Brenner, Assistant Administrator, OTT is authorized to sign PVPC applications for ARS. Send the completed application and all the Exhibits by traceable overnight courier to:

Dr. Richard J. Brenner
Assistant Administrator, OTT
5601 Sunnyside Avenue, Room 4-1156
Beltsville, MD 20705-5131
Tel. (301) 504-6905

Who Pays the Fees for a PVP or Plant Patent?

Your Unit pays the filing fee for either a PVPC or Plant Patent. (See below for instructions). OTT pays all other fees.

How is this handled administratively?

For PVPCs do not send payment or seed samples with your application. When OTT receives your application, OTT checks to make sure the PVP committee approved your release before filing a PVPC application. OTT also reviews the application to make sure it is completed accurately. If everything is OK, Rick Brenner, Assistant Administrator will sign the application and return it to you.

If the application is for a co-owned variety, OTT will obtain the signature of the co-owner before the application is returned to you. After the signed form is returned to you, it is your responsibility to send the application to the PVPC Office along with the required fee from your ARS project funds. The Patent Advisor will advise you about paying for the application fee to the USPTO for a plant patent application.

Who handles the licensing of an ARS variety?

Licensing of ARS solely-owned or jointly-owned varieties is handled by the Licensing Section of OTT. The licensing process is covered by U.S. Federal Law and must be carried out according to ARS policies and procedures. You may obtain information about the licensing process from your TTC, the ARS website at <http://www.ars.usda.gov/business/docs.htm?docid=768> or directly from the licensing section of OTT by calling (301) 504-5989. Please refer all persons who contact you about licensing to the OTT licensing section.

Do ARS breeders receive a share of license income?

Yes. U.S. Federal Law and ARS policies require that license income be shared with ARS breeders as an incentive award. ARS breeders collectively divide the first \$2,000 of license income received by ARS each year for each licensed variety, plus twenty-five percent (25%) of any income over the first \$2,000, up to a maximum of \$150,000 per breeder per year. If a variety is jointly-owned, the license income will first be divided between ARS and the co-owner, and then ARS will distribute its share of the license income to its breeders as previously stated. It is up to the co-owner to determine how to distribute its share of the revenue to its breeders.

In accordance with U.S. Federal Law, the balance of the license income received by ARS is used to cover expenses for a variety of technology transfer activities. Such expenses may include patent filing and prosecution costs; costs associated with the administration of patent activities; licensing and administrative expenses; rewards to employees for technology transfer activities, including annual ARS technology transfer awards; and expenses for any other activities that increase the potential for technology transfer. Research units do not receive any license income; ARS breeders may not personally receive license income from any source other than USDA.

SECTION 5 - Getting Credit for Work - Is a Germplasm Release a publication?

No. The Official Notice of Release, which is entered into ARIS and signed by the ONP Deputy Administrator, Plant Production and Protection is not a publication. However, publication of a plant germplasm release in a peer reviewed journal such as Crop Science or HortScience is considered an ARS publication. If you intend to publish your release in a peer reviewed journal, you do need to submit an ARS-115 in ARIS in addition to your entry in the Plant Material Docket of ARIS. If you have questions regarding these policies consult your RL or Area Office.

How will ARS scientist get credit for my work?

Each Area Director determines credit on annual performance reviews. It is recommended that Area Directors count the publication of a release notice in peer-reviewed publications as the equivalent of any other first authored peer reviewed publication for purposes of the annual performance review.

The Research Position Evaluation System (RPES) explicitly recognizes plant germplasm releases as a research output. Adoption or use of germplasm is an indication of impact.