A Statement of Responsibilities and Policies Relating to Seeds and other Propagation Materials of Field Crops

Mississippi State University
A STATEMENT OF RESPONSIBILITIES AND POLICIES RELATING TO
SEEDS AND OTHER PROPAGATION MATERIALS OF FIELD CROPS

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A policy statement of the Experiment Station Committee on Organization and Policy of the Experiment Station Section of the Association of State University and Land Grant Colleges, and the Agricultural Research Service and the Soil Conservation Service of the United States Department of Agriculture.
FOREWORD

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A STATEMENT OF RESPONSIBILITIES AND POLICIES RELATING TO SEEDS AND OTHER PROPAGATION MATERIALS OF FIELD CROPS

As early as 1945 there was developed in the North Central region a statement of policy covering part of the steps that are involved in the development, increase, and release of new varieties.* During the period of 1949 to 1951 a Committee of the Southern Directors, working with responsibilities and policies. That statement was adopted as a recommendation by the Directors of the Southern Stations in November 1951 and referred to the Experiment Station Committee on Organization and Policy for Transmission to the Directors of State Stations in the other three regions.

In June of 1952 the Directors of the North Central States revised the statement slightly and approved it in principle, but reserved "the right to continue more detailed and exact policies in this region than are prescribed in this statement."

During 1953 and 1954 the Northeastern and Western Directors reviewed both the Southern and North Central drafts and through their representative on the ESCOP subcommittee developed further suggestions and indicated approval of the revised statements. Suggestions from each of the regions were considered by the chairman of the committee and the designated representative of the Agricultural Research Service in preparing a draft, dated June 1954. Practically every change suggested in the original Southern draft by the North Central, Northeastern, and Western groups was incorporated. Several corrections were made so as to both clarify and strengthen the statement. The statement as revised was approved by ESCOP in November 1954. Additional revisions were made and approved by ESCOP in April 1962.

Changes in patterns of variety release and seed multiplication and distribution, along with other developments, indicated a need for re-examination of the policy statement adopted April 1962. Accordingly the Seed Policy Subcommittee was reactivated in 1965 to re-examine the Policy Statement and make appropriate changes and additions.

* In this policy statement the term variety is used in accordance with the International Code of Nomenclature for Cultivated Plants, 1961. A variety may be any one of the following: a clone, an inbred line, an interbreeding population of a cross-pollinated crop, or a first generation hybrid.
This revised policy statement has been approved in the four Regional Directors Conferences, the Experiment Station Committee on Policy, the Agricultural Research Service and the Soil Conservation Service of the U. S. Department of Agriculture.

Adaptations to specific crops will be required. The statement is designed largely to outline general policies and procedures and to point up general functions and opportunities for improving both public and private activities and services in the development and use of improved seeds and other propagation materials.

State Agricultural Experiment Stations and the U.S. Department of Agriculture were established to serve farmers, industries related to agriculture, and through these, all the people. The State Stations and the Department have functions and responsibilities at local, state, regional, and national levels. Both are supported largely by public funds. The public interest and good sense require that they work together and reduce duplication to the necessary minimum. Close cooperation in developing policies for making results of individual and joint effort available to farmers is an obligation. This includes policies concerned with developing and distributing improved crop varieties from state and federal plant breeding operations, while at the same time working with and assisting private enterprise to serve farmers effectively.

A statement of important points of policy in developing improved varieties and releasing these to seed producers and farmer users follows:

1. Sources of New Germ Plasm for Crop Improvement.

The Department of Agriculture, through its New Crops Research Branch, Crops Research Division, in cooperation with the State Stations and the SCS National Plant Materials Center, introduces and preserves new plant germ plasm collected in foreign countries, and new plants and plant variations collected in this country. Through various cooperative arrangements, plant characteristics are determined. These include reactions to insects, diseases, and climatic variations; and determination of quality, potential promising end-products, and other desirable traits. Accessions and information are made available to public and private agencies and no individual or agency is given exclusive rights to such introduced materials.
State agencies also conduct domestic and foreign plant explorations. Provision to make resulting plant collections available to public and private plant breeders is encouraged.

Breeding lines and nonreleased varieties received from cooperating scientists in foreign countries should be handled in a manner that will not violate the terms or conditions under which they are obtained.

As a further source of information on the characteristics of introductions, reports on observations and performance tests are requested from those receiving the materials. These reports are compiled, annotated, and disseminated through the four regional research (RRF) projects on new crops. Lists of stocks preserved in the National Seed Storage Laboratory, Fort Collins, Colorado, are prepared and distributed. Individuals or organizations proposing to increase and distribute seed or plant materials of such introductions in their original genetic form are asked to make this intention known to the agency from which the material came. Plans for joint release thereby can be considered. Confusion that might arise from duplication of identifying names or numbers given to the same introduction by public or private interests can thus be avoided (see Section 5). The source of introduced plant materials should be publicly acknowledged. Original Plant Introduction (PI) numbers should be cited.

When the genetic make-up of the introduced material is modified by selection, inbreeding, or hybridization, and the value of the line has been demonstrated as a new variety, a breeding line, or as the source of a special genetic character, the agency providing the original material should be informed of the specific characters in the new variety or line derived from the original introduction. The original source of these breeding materials should be acknowledged publicly, again referring to the PI number, or to an identifying accession number when no PI number has been assigned.

2. Studies of Heredity and Methods of Improvement

The State Agricultural Experiment Stations and the Department are obligated to conduct studies of the characters and properties of plant materials, modes of reproduction, the inheritance of characters, and the possibilities of modification
and control of heredity. These agencies and their workers are further obligated to make the results of these studies available to all plant breeders, institutional or private, through prompt publication of research findings.

Basic genetic materials from such studies should generally be released to all plant breeders. The term basic genetic material refers to plant materials possessing one or more potentially desirable characters which, in the opinion of the Experiment Station directors and/or agency administrators, may be of value in plant breeding and; in their opinion, general release is in the best interests of U. S. Agriculture and the state or agency research program.

Periodically, the originating station and/or agency should make available to the public a list of the germ plasm released for unrestricted use. If not formally published, the list should be available upon request.

Every effort should be made to insure that basic genetic materials are not monopolized by any interests. Furthermore, inbreds and other breeding materials should not be released for commercial use in foreign countries prior to their release in the U. S.

3. Breeding to Develop Superior Varieties

The breeding of better varieties to reduce production hazards, to improve quality, and to increase efficiency is one of the important functions of the Stations and the Department. As problems arise which can be solved by crop breeding, it is obvious that these governmental agencies have an obligation to investigate them. Free interchange of a wide range of materials, specialized facilities, scientific competence in many disciplines, and the opportunity to test, observe, and to study reactions under a wide range of environmental conditions enhance the probability of success.

Private plant breeders and seedsmen also perform a valuable service to the American farmer. A mutually helpful working relationship between the Stations, the Department, and private plant breeders and seed companies should be encouraged as to enhance the effectiveness of both public and private plant breeding efforts.
Public acknowledgement of the use of publicly developed germ plasm in a closed-pedigree variety is an obligation of the recipient agency, industry group, or individual as it gives due recognition to the contribution by public programs.

4. Testing and Evaluating Experimental Varieties

Experimental varieties and lines should be tested for yield, survival, disease and insect reaction, and other important characteristics in comparison with standard varieties, using techniques that assure valid measures of performance.

Crop varieties are not limited in adaptation by state or national boundaries. Interstate testing and interchange of materials should be encouraged. When appropriate, inter-country testing should also be encouraged. Regional testing facilitates more general use of widely adapted varieties. It also reduces time needed to provide reliable information on varietal adaptations.

New varieties of crops to be used for specialized industrial purposes should be tested for these uses to insure that they are satisfactory. The trade or industry using the crop should have opportunity to evaluate the new variety before distribution.

During testing and seed increase of experimental lines and new varieties, all reasonable precautions should be taken to protect the privileged status of this material and to prevent pirating and premature or unauthorized distribution.

5. Decisions on Release of New Varieties

Decisions on the release of new varieties should be made for each state by the appropriate agricultural agency of that state. It is recommended that in each state there be a policy committee or board of review charged with responsibility of reviewing the proposal for the release of a new variety in that state. Appropriate information concerning characteristics, performance, area of adaptation, specific use values, seed stocks, and proposed methods of increase and distribution should be presented to this committee as a basis for its decision.
When a variety has been tested on an interstate basis, opportunity should be given for each state in the interstate program to consider whether the variety should be released in that state. Interested states should be permitted to release the variety simultaneously. If, for some reason, prior interstate testing was neglected or impossible, the state which may shortly release a new variety should offer to all interested states seed of a new variety for testing and increase. Nearby states may thus obtain information to answer questions from their farmers about the new variety.

When the development of a new variety is the result of cooperative effort by a state or states and a federal agency, consideration for release should be a joint responsibility of the agencies involved.

6. Standards for Release of New Varieties

A new variety should not be released unless it is distinctly superior to existing varieties in one or more characteristics important for the crop, and is at least satisfactory in other major requirements. A major single production hazard which a new variety can overcome, e.g., a highly destructive disease, may become the overriding consideration in releasing a variety. Varieties with a very limited range in adaptation should not be released unless performance in that limited range is outstandingly superior, or the variety possesses important use values not otherwise available.

7. Naming and Registering of New Varieties

A new variety should be given a permanent designation before it is released. The designation should be acceptable to the states participating in the release, but the originating station or agency has the final responsibility. When this designation is a name, this name should consist preferably of one word, the shorter the better.

The International Code of Nomenclature for Cultivated Plants provides guides for the naming of varieties. It is recommended that this source be consulted with respect to new variety names.
Under no circumstances should a variety be distributed under more than one name nor should the same name be used more than once in a given crop.

Once established, a legitimate varietal name should not be changed.

Names which are misleading or which are identical or similar to brand names or trademarks associated with agricultural products should be avoided, as there may be an implied association of the variety and trade names or trademarks. Proposed names should be cleared with the U. S. Patent Office for possible infringement. One of the ways this can be accomplished is through the Crops Research Division, Agricultural Research Service.

New varieties of field crops registered by the Crop Science Society of America should be submitted for registration promptly following their release. The address of the Society is 677 South Segoe Road, Madison, Wisconsin 53711.

8. Definition of Seed Classes

The International Crop Improvement Association in its publication No. 20, dated August 1963, as amended October 1965 and October 1966, defines the various classes of seed. These definitions as they now stand and as they may be amended in the future are hereby made a part of this policy.

9. Increase. and Maintenance of Breeder Seed

When it becomes evident that a new variety is sufficiently promising to merit consideration for release, breeder seed should be increased to the volume needed to produce and maintain required foundation seed. So long as a variety is retained on the recommended list of the originating station, that station should maintain a reasonable reserve of breeder seed, which will be used to replenish and restore foundation seed of the variety to desired genetic purity. When a variety is distributed in several states, or when the originating station ceases to maintain breeder seed of a variety, a mutually satisfactory plan should be worked out among the interested stations regarding the maintenance of breeder seed. Interested states should be notified well in advance by the originating station when it plans to discontinue maintenance of breeder seed of a variety.
A sample of breeder or foundation seed of all newly-released varieties should be supplied to the National Seed Storage Laboratory, Fort Collins, Colorado.

10. Increase, Maintenance and Distribution of Foundation Seed

Foundation seed is of prime importance in the multiplication of a variety. It should be produced by those who have the experience, the facilities, and the skills to assure adequate supplies of pure seed. Foundation seed of publicly produced varieties should be increased under official guidance. Reserves of foundation seed should be maintained to assure a continuing supply in case of seed crop failure.

Distribution of foundation seed stocks may present interstate problems, particularly when a variety release is not simultaneous in all states. When foundation seed stocks are being distributed into another state where the variety is being distributed under allocation as a new release, the foundation seed should be offered through, or with the concurrence of, the official seed stocks or certifying agency in that state.

Foundation seed should be released in a manner that will be of the greatest benefit to farmers and the public in general. Foundation seed should not be used for speculative purposes. Within this context Foundation Seed programs should recognize the following basic principles:

1. All qualified seed growers and seedsmen should have an opportunity to obtain appropriate planting stocks at an equitable cost.

2. Limited release of foundation seed of a given variety is acceptable only in situations and only to the extent that general release to seed growers and seedsmen will not provide adequate seed of this variety on a continuing basis. (Note the exception in Principle No. 3)
3. Appropriate planting stocks of varieties developed cooperatively with the agencies of the U.S. Department of Agriculture must be made available through or with the concurrence of the seed stocks or certifying agency of the cooperating state(s) at an equitable cost to all qualified seed growers and seedsmen, as appropriate. There shall be no monopoly in access to foundation seed of such varieties.

11. Preparation and Release of Information

Seed producers, distributors, and farmers should be informed as fully as possible of the values and the adaptation of new varieties in comparison with varieties already grown.

Pertinent information as to the basic facts of origin and characteristics, and data justifying the increase and release of a new variety, shall be prepared by the fostering state(s) and/or agency(ies) and provided to other interested states or agencies. The information used in deciding upon release of a new variety should be used in presenting the case to seed producers, distributors, and farmers. Participating states should use this material, supported or modified by their own information, periodicals should include information on the regional adaptation of the variety. A uniform date for the release of initial publicity should be agreed upon by the interested states and, when appropriate, by cooperating federal agencies.

The above procedure will provide information that is complete, fair and unbiased, and will permit the seed producer, distributor, and farmer to make sound judgments in selecting varieties.

Seed production and demand must be developed together insofar as possible. A seed supply and no demand, or demand and no seed supply, often result in confusion and the failure of a variety to make its maximum contribution to agriculture. Thus promotional publicity in advance of the release of a new variety or incomplete publicity following its release are not desirable. An educational program setting forth the superior characteristics, region of adaptation, and any special limitations should be coordinated with seed supply.
Prepared by the Seed Subcommittee of the Experiment Station Committee on Organization and Policy:

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