

**OHIO CERTIFICATION STANDARDS AND PROCEDURES
MANUAL**

OHIO SEED IMPROVEMENT ASSOCIATION
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**OHIO SEED IMPROVEMENT ASSOCIATION
ORGANIZATION AND PURPOSE**

The Ohio Seed Improvement Association is designated by the Ohio Legislature as the Official Certifying Agency for the State of Ohio. The Association establishes and administers standards for certification and inspects the production of Certified seed under these standards. The Ohio Seed Improvement Association is a member of the Association of Official Seed Certifying Agencies.

The Ohio Seed Improvement Association is located at 6150 Avery Road, Dublin, Ohio 43017. It is a non-profit, unbiased, service organization. It renders invaluable service to the farmers of the state.

The purpose of certification shall be to maintain and make available to the farmers of Ohio and other states, and the public generally, through certification, high quality seeds of varieties so grown, conditioned, packaged, and labeled, as to insure genetic identity and purity in accordance with appropriate standards as to weeds, disease, viability, mechanical purity, grading and other matters pertaining to certification of seed. Varieties eligible for certification have resulted either from natural selection or through systematic plant breeding. In either case without a planned method for maintaining genetic purity, there is grave danger of losing varietal identity.

Varietal purity is the first consideration in seed certification but other factors such as weeds, diseases, viability, mechanical purity and grading are also important. One of the most effective methods of preventing the wider distribution of weeds is to plant weed-free seed. Adverse effects of plant diseases can be reduced by planting clean seed from disease-free fields. Properly cleaned and graded seed is easier to plant and gives more uniform stands.

Seed certification is designed, therefore, to maintain not only the genetic purity of superior crop varieties, but also reasonable standards of seed condition and quality. All applications for certification are made voluntarily. This system makes available to cooperating producers an unbiased and rigid inspection service.

**CONSTITUTION OF THE
OHIO SEED IMPROVEMENT ASSOCIATION
JANUARY 27, 1982
Amended 1/12/2006**

ARTICLE ONE -- PURPOSE

The purpose of this Association is to encourage the general use of pure seed of the best varieties throughout the state.

ARTICLE TWO -- MEMBERS

Section 2.01. Membership

A. Members are those persons having membership rights and privileges in the Association in accordance with the Articles and this Constitution. There shall be the following five classes of members:

(1) Active Member - An Active Member is an individual, firm, or corporation that has been accepted as an Active Member by the Board of Directors and has been assigned a producer number by a representative of the Association. An OSIA Active member is anyone who produces a seed crop of Certified, Quality Assurance, Identity Preserved or Information Only annually for field inspection and who has paid or is currently paying installments on the new Active member fee. Active member status may be maintained annually by applying for field inspection in Ohio during the current growing year. An active Member may change his status to an Associate Member for a period not to exceed 3 years and thereafter be reinstated as an Active Member without reconsideration by the Board of Directors. A new application for active membership shall be submitted to the Board of Directors, which may accept or reject the application. In making this determination, the Board of Directors may consider, among other things, the applicants reputation for honesty and integrity, ability as a seed grower, facilities for storing and conditioning, and/or processing seed, and conditions for seed production in accordance with such standards as may be adopted by this Association or as may be contained in the rules or regulations of the Ohio Department of Agriculture.

Every new Active Member shall serve a probationary period as determined by the Board of Directors. The Board of Directors shall prescribe conditions which shall prevail during this probationary period.

Each Active Member of record on the books of the Association on the date of notice of an annual or a special meeting of members is given shall be entitled at such meeting to one vote on each matter submitted to the members for their vote, consent, waiver, release, or other action. Active members are sometimes referred to in this Constitution as Avoting members.

(2) Associate Member - An Associate Member is an individual, firm, or corporation that has been an Active but has not applied for field inspection in the current growing year; or an individual, firm, or corporation that has been approved as a processor or conditioner by the Board

of Directors and has been assigned a producer's number by a representative of the Association; or an individual who is actively associated with an Active Member. Associate Members may attend and participate in any meeting of members and may serve in any meeting of members and may serve on committees of members or advisors; however, an Associate Member shall not be entitled to vote on any matter submitted to the members for their vote except an Associate Member may vote on Committees of Members or Advisors.

(3) Limited Member - An individual, firm or corporation that has been accepted as a Limited member by the Board of Directors and has been assigned a producer number by a representative of the Association. This special membership category provides for companies with their own proprietary lines or varieties, and seedsmen who desire to Certify crop species not funded by OSIA research levies, ie. legumes, grasses, corn, sod, etc. to obtain OSIA Certification field inspection and laboratory services. Limited membership status does not allow such members to certify public varieties of crops for which OSIA Active members pay research fees. This category would exempt participants from paying the Active member initiation fee and research acreage and bushel fee levies until such time as they choose to Certify a public variety if a crop species for which OSIA research levies are due. Limited members may attend and participate in any meetings of members and may serve on committees of members or advisors; however, a Limited member shall not be entitled to vote on any matter submitted to the members for their voice vote except a Limited Member may vote on Committees of Members or Advisors. A charge of \$300.00 for annual Limited membership dues is required.

(4) Emeritus Member - An AEmeritus Member is an individual who has been closely associated with the Association and is voted to be an Emeritus Member by the Board of Directors. Each Emeritus Member shall have all rights and privileges of an Associate Member.

(5) Affiliate Member - An AAffiliate Member is any individual, firm, or corporation not applying for certification that is in any way engaged in or connected with the seed industry or its allied professions or businesses. Affiliate Members may attend and participate in any meeting of members; however, an Affiliate Member shall not be entitled to vote on any matter at any such meeting.

B. Upon acceptance of any application for membership, a person shall become a member of the Association by paying any membership dues, fees or assessments as prescribed by the Board of Directors and by agreeing to abide by the Articles of Incorporation of the Association, this Constitution, and any rules adopted by the Board of Directors or the members.

Section 2.02. Annual Membership Dues.

Annual membership dues for members may be established from time to time by the Board of Directors. Such dues may vary from class to class of members, and shall be paid on a date or

dates established from time to time by the Board of Directors. The Board of Directors may determine that membership dues shall not be paid by any specific class of members.

Section 2.03. Certification and Inspection Fees.

The Board of Directors shall establish a schedule of fees to be charged for the services rendered by the Association in connection with the inspection and the certification of seed.

Section 2.04. Refunds and Special Assessments.

At the end of each fiscal year, the Board of Directors shall develop a budget consistent with the purposes of the Association for the forthcoming year, and the Board of Directors may determine whether Active Members of the Association shall be assessed additional dues, certification fees, or inspection fees or whether each Active Member of the Association shall receive a refund. Such assessment or refund shall be based upon the pro rata share of the membership dues, certification fees, inspection fees and other service fees paid by such Active Members to the Association during such fiscal year.

Section 2.05. Membership Book.

The Association shall keep a membership book containing the name and address of each member, the date of admission to membership, and the membership class to which the member belongs.

Section 2.06. Suspension, Termination or Resignation of Members

A. The Board of Directors shall have the authority to suspend or terminate any member of the Association for any of the following reasons: (1) The failure to pay any dues, inspection or certification fees, assessments or any other debts or obligations outstanding and owed to the Association within the time prescribed by this Constitution or the Board of Directors. (2) The production, processing, conditioning, packaging, labeling, or sale of seed contrary to Ohio law or the applicable rules and regulations adopted by the Vice President of the College of Agriculture, The Ohio State University, and the Director of the Ohio Department of Agriculture. (3) the violation or refusal to comply with any of the provisions of the Articles of Incorporation of the Association, this Constitution, or any other applicable rules or regulations adopted by the Board of Directors or the members of the Association.

B. Prior to the suspension or termination of the membership of a member, the Board of Directors shall give such member written notice, by personal delivery or by mail, of the reasons for initiation of membership suspension or termination proceedings. The written notice shall advise the member that (i) the member may request in writing a hearing before the Board of Directors, at which hearing the member present his contentions in writing, in person, or by representative at which hearing the member may present evidence and examine witnesses appearing for or against him; that (ii) the written request for a hearing must be received by the Association within thirty (30) days after notice of the suspension or termination proceeding is given to the member by the

Association; and that (iii) the failure to request a hearing within thirty (30) days after notice is given shall result in the automatic suspension or termination of the membership, as directed by the Board of Directors.

C. Any member may resign from the Association upon written notice to the Secretary and upon the payment of all outstanding membership dues, inspection or certification fees, special assessments, and any other obligations outstanding and owed to the Association.

Section 2.07. Decrease in Number of Members

Whenever the number of members of the Association which, under the law, the Articles, or this Constitution, must have a specified number of members, shall be reduced below such specified number, the Association shall not thereby be required to cease carrying on its activities, but the continuing members, if two or more, may fill all vacancies.

ARTICLE THREE - MEETING OF MEMBERS

Section 3.01. Annual Meetings

The annual meeting of the members for the election of the Board of Directors, for the consideration of reports to be laid before such meeting, and for the consideration of such other business as may properly come before such meeting shall be held on such date as may be fixed from time to time by the Board of Directors.

Section 3.02. Special Meetings

Special meetings of the members may be called only by the President, the Secretary, the Board of Directors by action at a meeting (or a majority of the Directors acting without a meeting) or by a petition of twenty-five (25) voting members.

Section 3.03. Place of Meetings.

Meetings of members maybe held at any place within or without the State of Ohio.

Section 3.04. Notice of Meetings.

A. Written notice stating the time and place of a special meeting, the purpose or purposes for which the meeting is called, shall be given either by personal delivery or by mail not less than ten (10), nor more than sixty (60) days before the date of the meeting (i) to each member entitled to notice of the meeting, (ii) by or at the direction of the President, the Vice President, or the Secretary. If mailed, such notice shall be addressed to the member's residence or usual place of business as it appears on the records of the Association. Notice of adjournment of a meeting need not be given at the time and place to which it is adjourned are fixed and announced at such meeting.

B. Following receipt by the President or the Secretary of a request in writing and submitted pursuant to a petition signed by 25 voting members, specifying the purpose or purposes for which the persons properly making such request have called a meeting of the members, delivered either in person or by registered mail to such officer by any persons entitled to call a meeting of members, such officer shall cause to be given to the members entitled thereto notice of a meeting to be held on a date not less than ten (10), nor more than sixty (60) days after receipt of such request, as such officer may fix. If such notice is not given within thirty (30) days after the receipt of such request by the President or the Secretary, then, and only then, the persons properly calling the meeting may fix the time of the meeting and give notice thereof in accordance with the provisions of this Constitution.

Section 3.05. Waiver of Notice.

Notice of the time, place, and purpose or purposes of any meeting of members may be waived in writing, either before or after the holding of such meeting, by any member, which writing shall be filed with, or entered upon the records of such meeting. The attendance of any member at any such meeting without protesting the lack of proper notice prior to, or at the commencement of the meeting shall be deemed to be a waiver by such member of notice of such meeting.

Section 3.06. Quorum.

Twenty-five (25) percent of the Active members must be present at any meeting of members to constitute a quorum for such meeting, but no action required by law, the Articles, or this Constitution to be authorized or taken by a specified proportion or number of the voting members may be authorized or taken by a lesser proportion. A majority of the voting members present at a meeting, whether or not a quorum is present, may adjourn such meeting from time to time, and, if a quorum is present at such adjourned meeting, any business may be transacted as if the meeting had been held as originally called.

Section 3.07. Votes Required.

At all elections of Directors, the candidates receiving the greatest number of votes shall be elected. The affirmative vote for a majority of the voting members present at a meeting at which a quorum is present shall be necessary for the authorization or taking of any action voted upon by the members, unless a specified proportion or number of the voting members is required by law, the Articles or this Constitution.

Section 3.08. Order of Business.

The order of business at any meeting of voting members shall be determined by the officer of the Association acting as chairman of such meeting unless otherwise determined by a majority vote of the voting members present and entitled to vote at such meeting.

Section 3.09. Voting by Corporate Members.

When any domestic corporation, non-profit or for profit, holds a voting membership in the Association, the chairman of the board, the president, any vice president, the secretary, or the treasurer of such corporation, and any such officer or cashier or trust officer of a banking or trust corporation holding such membership, and any like officer of a foreign corporation, non-profit or for profit, or of a foreign banking or trust corporation, holding such membership, shall conclusively be deemed to have authority to vote on behalf of said corporation, and execute written consents, waivers, and releases on behalf, unless before a vote is taken or a consent, waiver, or release is acted upon it appears by a certified copy of the regulations, by-laws, or a resolution of the trustees, directors, or executive committee of said corporation that such authority does not exist or is vested in some other officer or person. For the purpose of this section, a person exercising such authority as such officer is prima facie deemed to be duly elected, qualified, and acting as such officer.

Section 3.10. Committee of Members.

A. The voting members may create one or more committees of members, each to consist of not less than five (5) Active members. Associate and Emeritus members may serve on committees of members and shall be entitled to vote on any matter properly before any committee of members on which they serve. The purpose, authority, and composition of each committee of members shall be approved by an affirmative vote of a majority of the voting members present at a meeting at which a quorum is present.

B. Committee of members shall serve at the pleasure of the Active Members, shall act only in intervals between meetings of the members, and shall be subject to the control and direction of the Board of Directors. Each committee of members may act by a majority of its members at a meeting or by a writing or writings signed by all of its members. Meetings of the committees of members may be held through any communication equipment if all persons participating can hear each other at the same time.

ARTICLE FOUR - BOARD OF DIRECTORS**Section 4.01. Authority and Composition.**

Except where the law, the Articles, or this Constitution otherwise provide, all authority of the Association shall be vested in, and exercised by a Board of Directors. The Board of Directors shall be composed of twelve individuals.

Section 4.02. Classification of Directors.

The Directors of the Association shall be divided into two classes as follows:

A. Appointed Directors. The Director of the Ohio Department of Agriculture may appoint one (1) member of its staff to serve on the Board of Directors. The Vice President For Agricultural Administration may appoint three (3) members of its staff to serve on the Board of Directors. Each appointed Director shall serve a four-year term. These terms shall be so arranged by the Board of Directors such that only one Director is appointed hereunder annually. Each appointed Director shall be considered for quorum purposes and shall have the right to vote on all matters presented to the Directors or to committees on which they serve for their vote.

B. Elected Directors. Eight (8) Directors shall be elected by the voting members of the Association, each to serve a four-year term. No elected Director shall serve more than two (2) consecutive terms. Two (2) Directors shall be elected at each annual meeting of members in accordance with the following procedure:

(1) Sixty (60) days prior to each annual meeting, a Nominating Committee consisting of three (3) voting members selected by the Board shall meet to nominate at least two (2) Active Members for each of the two (2) Directors be elected at the annual meeting. The Nominating Committee shall cause the names of the nominees to be forwarded to each Active member forty (40) days prior to the annual meeting.

(2) Additional nominations may be made by a petition of any ten (10) Active members filed with the Secretary not less than twenty-five (25) days prior to the annual meeting. The Nominating Committee shall determine the validity of any petition and its determination shall be final.

(3) Twenty (20) days prior to the annual meeting, the Nominating Committee shall mail a ballot containing the nominations for Directors to each Active Member. Each Active member may vote for not more than two (2) nominees and shall return the ballots to the Association in sealed envelopes upon which the signature of the voting member appears. Ballots not received by the Association three (3) days before the annual meeting shall not be counted.

(4) The ballots shall be counted on or before the day of the annual meeting by three (3) tellers appointed by the President. The two (2) nominees receiving the greatest number of votes shall be elected Directors. In the event there is a tie in the number of votes received by two or more nominees, the tie shall be broken by secret ballot taken at the annual meeting from the voting members present thereat.

Section 4.03. Removal

A. An elected Director or elected Directors may be removed from office, with or without assigning any cause, only by the vote of a majority of the Active membership at an annual

meeting of members or a special meeting called for that purpose. In case of any such removal, a new Director may be elected by a majority vote of the voting members at the same meeting for the unexpired term of each Director so removed. Failure to elect a Director to fill the unexpired term of any Director removed shall be deemed to create a vacancy in the Board.

B. An appointed Director or appointed Directors may be removed from office (i)(a) with the vote of a majority of the voting members present at a meeting of members at which a quorum is present and (b) with the written consent of the Director of the Ohio Department of Agriculture or the Vice President of the College of Agriculture and Home Economics and Director of the Ohio Agricultural Research and Development Center who appointed such Director or (ii) with the written consent of the Director of the Ohio Department of Agriculture or the Vice President of the College of Agriculture and Home Economics and Director of the Agricultural Research and Development Center who appointed such director. In case of such removal, a new Director may be appointed in accordance with the provisions of Section 4.02(A) of this Constitution for the unexpired term of each Director so removed. Failure to appoint a Director to fill the unexpired term of any appointed Director removed shall be deemed to create a vacancy on the Board.

Section 4.04. Vacancies.

The remaining Directors, though less than a majority of the whole authorized number of Directors, may, by the vote of a majority of their number, fill any vacancy on the Board for the unexpired term.

Section 4.05. Meetings.

A meeting of the Board of Directors shall be held immediately following the annual meeting of members at which Directors are elected, and notice of such meeting need not be given. The Board of Directors shall hold such other meetings as may from time to time be called, and such other meetings of the Board of Directors may be called only by the President, the Secretary or any three Directors. All meetings of the Board of Directors shall be held at the principal office of the Association in Dublin, Ohio, or at such other place within or without the State of Ohio as the Board of Directors may from time to time determine by resolution. Meetings of the Board of Directors may be held through any communications equipment if all persons participating can hear each other at the same time and participation in a meeting pursuant to this provision shall constitute presence at such meeting.

Section 4.06. Notice of Meeting.

A. Notice of the time and place of each meeting of the Board of Directors for which such notice is required by law, the Articles, or this Constitution shall be given to each of the Directors by at least one of the following methods:

(i) by a writing mailed not less than five days before such meeting and addressed to the residence or usual place of business of a Director, as such address appears on the records of the Association; or

(ii) by telegraph, cable, radio, wireless, or a wiring sent or delivered to the residence or usual place of business of a Director as the same appears on the records of the Association, not later than the day before the date on which such meeting is to be held; or

(iii) personally or by telephone not later than the day before the date on which such meeting is to be held.

B. Notice given to a Director by any one of the methods specified in this constitution shall be sufficient, and the method of giving notice to all Directors need not be uniform. Notice of any meeting of the Board of Directors may be given only by the President, the Secretary or by the Directors calling the meeting. Any such notice need not specify the purpose or purposes of the meeting. Notice of adjournment of a meeting of the Board of Directors need not be given if the time and place to which it is adjourned are fixed and announced at such meeting.

Section 4.07. Waiver of Notice

Notice of any meeting of the Board of Directors may be waived in writing, either before or after the holding of such meeting, by any Director, which writing shall be filed with or entered upon the records of the meeting. The attendance of any Director at any meeting of Directors without protesting, prior to or at the commencement of the meeting, the lack of proper notice, shall be deemed to be a waiver by him of notice of such meeting.

Section 4.08. Quorum.

A majority of the whole authorized number of Directors shall be necessary to constitute a quorum for a meeting of the Board of Directors, except that a majority of the Directors in office shall constitute a quorum for filling a vacancy in the Board. The act of a majority of the Directors present at a meeting at which a quorum is present is the act of the Board, except as otherwise required by law, the Articles, or this Constitution.

Section 4.09. Committees of Directors

A. The Board of Directors may create one or more committees of Directors, each to consist of not less than three (3) Directors, and may delegate to such committees any of the authority of the Board of Directors, however conferred, other than that of filling vacancies among the Directors or in the committees of Directors. The Board of Directors or the President may appoint one or more Directors as alternate members of any such committee which alternate members may take the place of any absent member or members at any meeting of such committee,

B. Committees of Directors shall serve at the pleasure of the Board of Directors, shall act only in the intervals between meetings of the Board of Directors, and shall be subject to the control and direction of the Board of Directors. Each of the committees of Directors may act by a majority of

its members at a meeting or by a writing or writings signed by all of its members. Meetings of the committees of Directors may be held through any communications equipment if all persons participating can hear each other at the same time.

C. Any act or authorization of an act by a committee of Directors within the authority delegated to it shall be as effective for all purposes as the act or authorization of the Board of Directors. Notice of the time and place of each meeting of any committee of Directors shall be given to each of its members by at least one of the methods specified in Section 4.07 hereof. A meeting of any such committee of Directors may be called only by the President, the Secretary or by a member of such committee of Directors.

Section 4.10. Compensation

Directors shall not receive any compensation for their service; provided, however, that the Board of Directors may, by resolution, authorize the Association to reimburse any Director for his reasonable and necessary traveling expenses, and other expenses incurred when attending a meeting of the Board of Directors or a meeting of a committee of Directors, or any other meetings approved by the Board of Directors, and the payment of a daily allowance in connection with attendance at any such meeting.

Section 4.11. By-Laws

The Board of Directors may adopt, and amend from time to time, By-Laws for their own government, which By-Laws shall not be inconsistent with the law, the Articles or this Constitution.

Section 4.12. Rescission of Directors Action.

At any meeting of members at which a quorum is present, a majority of all the Active Members of the Association may rescind, cancel, or annul any action previously taken by the Board of Directors, subject to the contract rights of other persons.

ARTICLE FIVE --OFFICERS

Section 5.01. Offices

The officers of the Association to be elected by the Board of Directors shall be a President, a Vice-President, a Secretary, a Manager, a Treasurer, and such other officers and assistant officers as the Board of Directors may from time to time elect. The President and Vice-President shall be Directors; the Secretary, the Manager, and Treasurer, and other officers need not be Directors. Any two or more offices may be held by the same person, but no officer shall execute, acknowledge, or verify any instrument in more than one capacity if such instrument is required by

law, the Articles or this Constitution to be executed, acknowledged, or verified by two or more officers.

Section 5.02. Tenure of Office.

The officers of the Association shall hold office at the pleasure of the Board of Directors. Any officer of the Association may be removed, either with or without assigning any cause, at any time, by the affirmative vote of a majority of all the Directors then in office; provided, however, that such removal shall be without prejudice to the contract rights, if any, of the person so removed.

Section 5.03. Duties of the President; Committees of Advisors.

The President shall be the chief executive officer of the Association and shall exercise supervision over the business of the Association and shall have, among such additional and different powers and duties as the Board of Directors may from time to time assign to him, the power and authority to sign all deeds, mortgages, bonds, contracts, notes and other instruments requiring the signature of the President of the Association. Unless otherwise directed by the Board of Directors, it shall be the duty of the President to preside at all meetings of members and of the Board of Directors. The President may appoint committees of advisors to assist him in the supervision and management of the business of the Association. Members of the Association and persons who are not members of the Association may serve on committees of advisors. The President may authorize the reimbursement of any advisor for his reasonable and necessary traveling or other expenses, or the payment of a daily allowance to such advisor. Committees of advisors shall be subject to the direction and control of the Board of Directors.

Section 5.04. Duties of the Vice-President.

In the absence of the President or in the event of his inability or refusal to act, the Vice-President shall perform the duties of the President, and when so acting, shall have all the powers of and be subject to all restrictions upon the President. The Vice-President shall perform such other duties and have such other powers as the Board of Directors may from time to time prescribe.

Section 5.05. Duties of the Secretary.

It shall be the duty of the Secretary to keep minutes of all the proceedings of the members and the Board of Directors and to make a proper record of the same; to serve all notices required by law and this Constitution; and to perform such other and further duties as may from time to time be assigned to him by the Board of Directors or the President.

Section 5.06. Duties of the Treasurer.

The Treasurer shall, with the President, sign all notes, deeds and other instruments necessary to conduct the affairs of the Association as authorized by the Board of Directors; and shall perform such other duties as from time to time may be required of him by the Board of Directors.

Section 5.07. Duties of the Manager.

The Manager shall undertake and direct a program to accomplish the purposes of this Association; supervise and direct all activities of the Association with respect to the inspection and certification of seed, subject to the instructions of the Board of Directors; employ such clerical and technical personnel and purchase such supplies, materials and equipment as may be required for such purposes; receive and disburse all funds received by the Association for such purposes, and deposit any monies received to the credit of the Association in such depositories as may be designated by the Board of Directors; be custodian of any property, both real and personal, which may be received by the Association; keep a full and accurate account of all the financial transactions of the Association in books belonging to the Association, and deliver such books to his successor in office when qualified. It shall be the duty of the Manager to make a full report of all matters and business pertaining to the Association to the members at the annual meeting, and to the directors whenever required by them, and to make all reports required by law on behalf of the Association. The Manager shall perform such duties as may be required of him by the Board of Directors.

ARTICLE SIX--INSPECTION AND CERTIFICATION**Section 6.01. Rules and Regulations.**

The eligibility and standards for the inspection and the certification of each class of seed for each crop and for the inspection and certification of such seed shall be in accordance with the rules and regulations adopted by the Vice President of the College of Agriculture, The Ohio State University and the Director of the Ohio Department of Agriculture, subject to such rules and procedures as may be established by the Board of Directors which are not inconsistent therewith.

Section 6.02. Inspections.

All inspections conducted by this Association for the purpose of certification of seed shall be supervised by a representative of the Association whose employment has been approved by the Manager of the Association. No member of the staff of the Ohio Agricultural Research and Development Center or the Ohio State University shall be responsible for the certification of seed.

Section 6.03 Certification.

The certification of seed shall be issued by the Manager, on behalf of the Association, on the basis of the report submitted by the inspectors and analysts employed by the Association. If the certification of seed is rejected on the basis of such inspection and analysis, an Active Member may present this matter to the Board of Directors at their next regular meeting. A member may request a special board meeting to consider this rejection. However, if the rejection is sustained, the member requesting the special meeting shall reimburse the Association the full cost of said meeting. The determination of the Board of Directors with respect to the rejection shall be final.

ARTICLE SEVEN--INDEMNIFICATION AND INSURANCE

Section 7.01. Indemnification.

The Association shall indemnify any person who was or is a party or is threatened to be made a party to any threatened, pending or completed action, suit, or proceeding, whether civil, criminal, administrative, or investigative (other than an action threatened or instituted directly by the corporation) by reason of the fact that he is or was a Director, officer, employee or agent of the Association, or is or was serving at the request of the Association as a director, trustee, officer, employee or agent of another corporation, partnership, joint venture, trust, or other enterprise, against expenses (including attorneys fees), judgments, fines, and amounts paid in settlement actually and reasonably incurred by him in connection with such action, suit, or proceeding if he acted in good faith and in a manner he reasonably believed to be in or not opposed to the best interests of the Association, and with respect to any criminal action or proceeding, had no reasonable cause to believe his conduct was unlawful. The termination of any action, suit, or proceeding by judgment, order, settlement or conviction, or upon a plea of nolo contendere or its equivalent, shall not, of itself, create a presumption that the person did not act in good faith and in a manner which he reasonably believed to be in or not opposed to the best interest of the Association, and with respect to any criminal action or proceeding, he has reasonable cause to believe that his conduct was unlawful.

Section 7.02. Discretionary Indemnification.

The Association may indemnify or agree to indemnify any person who was or is a party or is threatened to be made a party to any threatened, pending, or completed action or suit which is threatened or instituted by the Association directly (rather than a derivative action in the right of the corporation) procure a judgment in its favor by reason of the fact that he is or was a Director, officer, employee, or agent of the Association or is or was serving at the request of the Association as a director, trustee, officer employee, or agent of another corporation, partnership, joint venture, trust, or other enterprise, against expenses (including attorneys fees) actually and reasonably incurred by him in connection with such action or suit if he acted in good faith and in a manner he reasonably believed to be in or not opposed to the best interest of the Association, except that no such indemnification shall be made in respect of any claim, issue or matter as to which such person shall have been adjudged to be liable for negligence or misconduct in the performance of his duty to the Association unless and only to the extent that the Court of Common Pleas, Franklin County, Ohio or the court in which such action or suit was brought shall determine upon application that, despite the adjudication of liability, but in view of all the circumstances of the case, such person is fairly and reasonably entitled to indemnity for such expenses as such Court of Common Pleas or such other court shall deem proper.

Section 7.03. Indemnification for Expenses.

To the extent that Director, officer, employee or agent has been successful on the merits or otherwise in defense of any action, suit or proceeding referred to in Section 7.02, or in defense of

any claim, issue or matter therein, he shall be indemnified against expenses (including attorneys fees) actually and reasonably incurred by him in connection therewith.

Section 7.04. Determination Required.

Any indemnification under Sections 7.01 and 7.02 (unless ordered by a Court) shall be made by the Association only under a determination that the indemnification of the Director, officer, employee or agent is proper in the circumstances because he has met the applicable standard of conduct set forth in Sections 7.01 and 7.02. Such determination shall be made (A) by the Board of Directors by a majority vote of a quorum consisting of directors who were not and are not parties to such action, suit or proceeding, or (B) if such a quorum is not obtainable or if a majority of a quorum of disinterested Directors so directs, in a written opinion by independent legal counsel, or (C) by the voting members. Any determination made by the disinterested Directors or by an independent legal counsel under this Section 7.04 to provide indemnity under Section 7.01 to a person threatened or sued in the right of the Association (derivatively) shall be promptly communicated to the person who threatened or brought the derivative action or suit in the right of the Association, corporation, and such person shall have the right, within sixty (60) days after receipt of such notification to, petition the Court of Common Pleas of Franklin county, Ohio or the court in which action or suit was brought to review the reasonableness of such determination.

Section 7.05. Advances for Expenses.

Expenses (including Attorneys fees) incurred in defending any civil or criminal action, suit, or proceeding referred in Sections 7.01 and 7.02 may be paid by the Association in advance of the final disposition of such action, suit or proceeding as authorized by the Board of Directors in the specific case upon receipt of an undertaking by or on behalf of the trustee, officer, employee or agent to repay such amount, unless it shall ultimately be determined that he is entitled to be indemnified by the Association as authorized in this Article Seven.

Section 7.06. Article Seven Not Exclusive.

The indemnification provided by this Article Seven shall not be deemed exclusive of any other rights to which those seeking indemnification may be entitled under the Articles, this Constitution, or any agreement, vote of voting members or disinterested Directors, or otherwise, both as to action in his official capacity and as to action in another capacity while holding such office, and shall continue as to a person who has ceased to be a Director, officer, employee, or agent and shall inure to the benefit of the heirs, executors, and administrators of such person.

Section 7.07. Insurance.

The Association may purchase and maintain insurance on behalf of any person who or was a Director, officer, employee or agent of the Association, or is or was serving at the request of the Association as a director, trustee, officer, employee or agent of another corporation, partnership, joint venture, trust, or other enterprise, against any liability asserted against him and incurred by him in any such capacity, or arising out of his status as such, whether or not the Association

would have the power to indemnify him against such liability under the provisions of this Article Seven.

Section 7.08. Definition of Athe Association.

As used in this Article Seven, references to Athe Association include all constituent associations or corporations, so that any person who is or was a director, trustee, officer, employee or agent of such a constituent association or corporation, or is or was serving at the request of such constituent association or corporation as a director, trustee, officer, employee or agent of another corporation, partnership, joint venture, trust, or other enterprise, shall stand in the same position under the provisions of this Article Seven with respect to the new or surviving association or corporation as he would if he had served the new or surviving association or corporation in the same capacity.

ARTICLE EIGHT--MISCELLANEOUS

Section 8.01. Amendments.

This Constitution may be amended, or an amended Constitution may be adopted, at a meeting of voting members, only by the affirmative vote of not less than a 2/3 majority of the voting members at the meeting of the Association, or without a meeting by the written consent of not less than two-thirds of the voting members of the Association. Notice of the proposed amendments shall have been sent to each active member at least ten (10) days prior to the meeting.

Section 8.02. Action by Voting Members or Directors Without a Meeting.

Anything contained in this Constitution to the contrary notwithstanding, any action which may be authorized or taken at a meeting of the voting members, of the Board of Directors, of a Committee of Directors, of a committee of Members, or of a Committee of Advisors, as the case may be, may be authorized or taken without a meeting with the affirmative vote of approval of, and in a writing or writings signed by, all of the voting members, all of the Directors, or all of the members of such Committee of Directors or such Committee of Members or such Committee of Advisors as the case may be, who would be entitled to notice of a meeting for such purpose, or, in the case of members, such other proportion or number of voting members, not less than a majority, as the Articles or this constitution permit. Any such writing shall be filed with or entered upon the records of the Association.

Section 8.03. Notice.

Unless otherwise directed by the Articles, this Constitution, or the Board of Directors, any notice or communication required or permitted by the Articles, this Constitution, or the Board of

Directors shall be sufficiently given (I) the Association if sent by first class mail to the address of the principal office of the Association or (II) to any member if sent by first class mail to the members address as it appears on the records of the Association.

Section 8.04. Computation of Time for Notice.

In computing the period of time for the giving of a notice required or permitted under the Articles, Constitution, a resolution of the members or Directors, the day on which the notice is given shall be excluded, and the day when the act for which notice is given is to be done shall be included, unless the instrument calling for the notice otherwise provides. If notice is permitted to be given by mail, the notice shall be deemed to have been given when deposited in the mail.

Section 8.05. Gender.

The masculine pronouns used in the Articles or in this Constitution shall be construed to include the equivalent feminine pronouns and vice versa.

SHOULD I BE A CERTIFIED SEED GROWER?

Certified Seed is a product of high standards. Certified Seed producers must maintain good management practices and have superior practical knowledge of farming. Certified Seed producers are skilled in the art and science of seed conditioning and have a thorough understanding of the certification philosophy. They appreciate the value of high quality seed as an integral part of a profitable farm management system. They can provide competent advice on variety selection and are knowledgeable of all varietal characteristics.

Plant breeders at the land grant universities throughout the United States have made available a vast store of basic information and valuable parent materials and progenies. Recognition and understanding of the values of good seed help Certified Seed producers to fulfill their part in bringing the fruits of scientific advancement to the farmers of the state of Ohio. They must accept the profound responsibility of maintaining the genetic purity of Certified Seed.

Certified Seed producers must think, talk, and **believe** in the product they produce. They must know by heart the practices that contribute to top quality seed and use them in the production of their product. They must deal honestly with customers, neighbors, contract growers, themselves, and the association. They must be willing to follow practices that may even cut profits if necessary to benefit the overall product quality of Certified Seed. Certified Seed producers realize that production of Certified Seed is not a Get-rich-quick scheme. **PROFIT THROUGH QUALITY** serves as their primary aim. Certified Seed producers must have an eye for detail and a willingness to take the extra steps necessary for complete documentation. Through programs and

news letters provided by the association, Certified Seed producers stay informed about current legal issues relating to seed and about current seed industry trends. They actively support the formulation and enforcement of good seed laws.

These are the attributes that comprise the ideal producer of Certified Seed. Certified Seed producers strive to employ as many of these attributes as possible in the day--day process of growing, conditioning and selling Certified Seed. Production of Certified Seed is not easy, but it will reward the producer with a position among leaders in the agricultural industry.

WILL YOU QUALIFY?

STEPS TO BECOMING AN ACTIVE MEMBER

- 1 **Request application for active membership from OSIA**
- 2 **Complete application**
- 3 **Submit completed application OSIA with \$25.00 application fee (Must be 90 days prior seeding of crop for inspection)**
- 4 **Visit from OSIA personnel**
- 5 **Board of Directors reviews and approves or rejects applications**
- 6 **Pay new membership fees: Active member dues, research and building assessments**
- 7 **OSIA manager assigns producer number**
- 8 **OSIA ACTIVE MEMBER**
- 9 **Serve 1 Year Probation**

MINIMUM QUALIFICATIONS FOR PRODUCERS AND DISTRIBUTORS OF CERTIFIED SEED

1. Ownership or control of land that is not infested with weeds that are troublesome in the crops grown for seed, and on which proper isolation can be obtained.
2. An uncommon willingness and ability to handle correspondence promptly to insure properly produced, inspected, harvested, and conditioned seed. Inherent honesty and fairness in dealing with others are essential.
3. Ownership of the necessary seed conditioning equipment. For each type of seed the item in the AA group are essential; those in the AB group advisable, though not always necessary. Active members may have their seed conditioned by other OSIA active members or approved conditioners.

Small Grains and Soybeans:

- A. Seed cleaner and positive screen-cleaning mechanism.
 - Combine or thresher.
 - Sewing machine.
- B. Disc separator or length grader.
 - Seed treater.
 - Gravity separator.
 - Crop drying facilities.
 - Spirals

Corn Hybrids:

- A. Forced air drier.
 - Corn sheller.
 - Width and thickness grader.
 - Length grader.
 - Sewing machine.
- B. Seed treater.
 - Gravity separator.

Forage Crops:

- A. Properly equipped establishments for conditioning forage seeds will be designated by the Ohio Seed Improvement Association.

4. Seedhouse and storage. Buildings or portions of building should be kept clean and presentable to enhance the name Certified. A dry storage in which no other loose grain is kept nearby is essential. For corn, bulking bins in which 100 bushels or more of shelled corn can be bulked, as well as bins in which each grade can be stored, are highly desirable.

For small grains and soybeans it is advisable to have enough bins so that all seed can be stored in bins both before and after cleaning.

CONTRACT GROWING OF CERTIFIED SEED

Growers who have land and production facilities for growing clean seed, but who do not wish condition and distribute it, should make arrangements with members who are equipped to condition such seed.

Written agreements should be drawn up and signed that clearly outline the responsibilities of each (grower and conditioner-distributor) before application is made for inspection so that matters

pertaining to certification will be understood by both parties. The conditioner-distributor is the proper one to handle the inspection and certification procedures.

CONTRACTS FOR SALE

Seed sold on contract should be sold **PENDING OR SUBJECT to** certification. No seed is Certified until certification tags or certification labels have been attached to the bags of lots that have been sampled, tested and found eligible for certification.

CERTIFICATION PROCEDURES

1. Become An Active Member of the Ohio Seed Improvement Association

Persons wishing to certify seed must apply for and receive active membership in the Ohio Seed Improvement Association prior to seeding of the crop be certified. The OSIA office must receive applications for membership at least 90 days prior to seeding of the crop to be certified. Applications must also pass review by the Board of Directors and remain subject to scheduled meeting dates.

2. Secure Seed of an Eligible Variety

The variety or hybrid to be certified must be eligible in accordance with Eligibility Requirements for Certification of Crop Varieties.

3. Secure Eligible Seed Stock

The active member must secure eligible seed stock for planting. Only Foundation or Registered seed stocks are normally eligible for certification. Certified Seed may be reproduced from seed of the Certified class only with permission of the breeder under special circumstances. Questions about the eligibility of a particular source lot should be referred to the Ohio Seed Improvement Association office. In any case, the member should accept no seed source without the appropriate Foundation or Registered seed tag attached.

4. Plant Seed on Eligible Land

The Ohio Seed Improvement Association maintains standards for land eligibility in accordance with standards set by the Association of Official Seed Certifying Agencies and defined under field and seed standards for each of the respective crops.

5. Complete and Submit Field Application Forms

The active member may request official field application forms from the Ohio Seed Improvement Association office. Each field requires a separate application form. Application must be completed in detail before acceptance for certification. The application forms should be returned, accompanied by the proper fees on or before the due date stated on the application form in order to avoid penalty fees.

6. Prepare the Field for Official Inspection

Remove from the standing crop all crop plants, weeds, off-type plants, etc., which may affect purity of the seed when harvested.

7. OFFICIAL FIELD INSPECTION

An official inspector of the Ohio Seed Improvement Association will perform an inspection of all fields applied for which have received approval for seed source eligibility and land eligibility by the office staff. The inspector will determine varietal purity of the crop as well as note amount and kind of other crop plants, weeds, and diseases. The official field inspection must occur before the member/contract grower may harvest and store it with other Certified fields in a bin. Responsibility lies with the member to verify status of the field inspection prior to harvest.

8. HARVEST THE SEED

The producer must be absolutely certain that each field has received and passed the field inspection prior harvest of that seed. Seed from a rejected field stored in a bin along with seed from passed fields will cause rejection of the entire bin of seed. Special care must be taken to thoroughly clean all equipment which will in any way be involved in moving the crop from the field state to storage. All equipment must be thoroughly cleaned before changing varieties.

9. CONDITION THE SEED

The Certified seedsmen must exercise extreme care to assure no mixing of varieties or other crops in the cleaning process. **Only an active, associate, or limited member** of the Ohio Seed Improvement Association may condition Certified seed.

10. SAMPLE THE CONDITIONED SEED

The conditioner must submit a representative sample of the seed as it is to be offered for sale to the Ohio Seed Improvement Association for laboratory testing accompanied by a Sampling

Report. Minimum requirements are 200 bushels or 50% of the entire lot whichever amount is the least. Competent seed analysts employed by the association will analyze each sample for bushel weight, moisture, weeds, pure seed and germination. They will return a report of the results of each test to the seedsman.

11. BAG THE SEED AND SEAL THE CONTAINERS

Each container of seed sold must be sealed in such a manner that the seal will be destroyed when the package is opened. Approved methods include one or more of the following: 1) sewing of the certification label showing variety, kind and seed lot number into the bag; 2) sewing of the analysis tag showing variety, kind and seed lot number into the bag; 3) sewing of a tag identifying the variety, kind and lot number into the bag.

12. ATTACH CERTIFIED SEED LABELS

Final certification is based on the findings of the field inspector and the seed analyst who examines the cleaned samples. Certification tags are issued only to those growers whose lots of cleaned seed meet the specific field and seed standards for the crop. Certification tags may be issued to the conditioner prior to bagging of the seed. However, the entire lot of seed must remain on the premises or in a warehouse under the members control pending receipt of a passed genetic purity analysis. Failure to comply with this requirement could result in disciplinary action by the Ohio Seed Improvement Association Board of Directors. The conditioner should destroy immediately any tags not attached to bags of seed and complete and return an Affidavit of Tag Disposal to the OSIA office. The association reserves the right to request return of any tags printed on any lot which fails genetic purity analysis for certification.

13. SPOT CHECKS

The association reserves the right to check and recheck any and every lot of seed that has been offered for certification. An official inspector of the Ohio Seed Improvement Association may secure a representative sample of any lot of seed to assure the farmer of Ohio he has obtained seed of high quality and genetic purity.

SUGGESTIONS TO THE CERTIFIED SEED GROWER AND DISTRIBUTOR

PLANTING AND HARVESTING

Extraordinary care must be exercised in planting and harvesting. Mixing of varieties frequently occurs in the seeding equipment, harvesting machines, and in the transporting vehicle. The conditioner must see that these machines are thoroughly cleaned in order to safeguard the purity of the seed he is producing.

Since it is almost impossible to *completely* clean a combine, *the first 25 bushels of grain harvested should not be sold or used as seed.* Harvesting any crop after a different preceding crop is a good way to prevent varietal mixtures.

Weeds that are listed as objectionable weeds under the seed standards of a specific crop should be removed from field before harvesting.

Off-type plants of the same crop should be removed, in so far as possible, by the grower prior to field inspection.

CLEANING AND STORING

Seed cleaning through country elevators is not acceptable. All seed must be conditioned by an Ohio Seed Improvement Association Active, Associate, or Limited member. The responsibility of proper cleaning or sizing in the case of seed corn, rests with the applicant. The prestige and reputation of the grower depends upon the quality of seed he sells.

Harvested material that is in any way questionable should not be saved or considered for sale as Certified seed. Discard any uncertain portion of the lot of seed.

Each lot of seed presents its own problems. An air screen cleaner properly adjusted for one lot of seed may not prove satisfactory for another. Conditioning of quality seed requires continual adjustment and monitoring of conditioning equipment.

Thoroughly clean the fanning mill, screens and elevators before starting on any lot of seed.

Select the proper screens for the seed being cleaned. The following screens are recommended:

- For WHEAT:** Upper screen, 14/64 round hole. Lower screen, 5-1/2/64x3/4 slotted perforations. For special weed problems in wheat: lower screen, 10 triangular for wild buckwheat, or 4x8-1/2 wire screen for corn cockle.
- For OATS:** Upper screen, 8/64x3/4, or 9/64x1/4 slotted perforation, or 18/64 round hole.

Lower screen, 1/13x1/2 slotted perforation, or 11 triangular (wild buckwheat).

For SOYBEANS: Upper screen, 18/64 to 20/64 round hole
Lower screen, 11/64x3/4 to 14/64x3/4 slotted perforation.

If air screen cleaner is not equipped with an effective screen cleaning mechanism, it is necessary to stop the mill frequently to clean the lower screens. Operators neglect this more than any other single item. Seed should be stored in clean bins under conditions that prevent mixing or injury to the seed in storage.

SAMPLING CONSIDERATIONS

Certified seedsmen should closely monitor quality for both bag and bulk lots of new crop and carryover seed. Periodic aeration and sampling of certified seed stored in the bulk is recommended. Carryover lots of small grains should be annually fumigated. Re-testing of small grain seed should be scheduled close to the actual shipping date.

Multiple sampling of certified lots beyond minimum certification requirements is encouraged. Seedsmen should establish their own in house quality control procedures. Sampling procedures should follow those described in the **AOSA Rules For Testing Seeds**. Accurate and random sampling techniques must be followed. The accuracy of laboratory test results is directly related to random and representative samples being submitted for testing. Certified seedsmen are expected to update the date of test information on the analysis tag for their carryover certified seedlots.

CERTIFICATION TAGS OR LABELS

No seed is Certified until the official association tag or label is attached. Any seed offered as Certified without a Certified tag or label is infringement of the State Seed Law. Tags or labels are supplied by the Association for seed meeting requirements. Exception to this involves any certified seed of any class sold in bulk. These may be approved for certification without the issuance of any tags or labels, provided all stipulations have been met and are approved by the Seed Improvement Association. In the case of seed sold in the bulk, an invoice shall be used to identify the certifying agency, crop kind, variety, class of seed and lot number.

**THE CERTIFICATION TAG OR LABEL MUST BE ATTACHED TO EACH
CONTAINER OF SEED SOLD**

RECORDS AND LEGAL RESPONSIBILITIES

The grower of Certified seed is responsible for an accurate record of the names and addresses of the purchasers of his seed, the date of delivery, and the amount delivered. Samples of seed of all intrastate shipments must be preserved for at least one year, and records of interstate shipments must be preserved for three years.

Any dispute arising over a lot of Certified seed, which is not satisfactorily adjusted through the producer, is referred immediately to the Directors of The Ohio Seed Improvement Association, whose decision shall be final.

All producer-distributors of Certified seeds and their agents are required to operate in accordance with State and Federal laws, and their procedures are subject at all times to the inspections of State and Federal, as well as Association, seed inspectors.

DUE DATES -- FEES -- REFUNDS

DUE DATES

Applications, completely and correctly filled out, including fees, must be submitted to The Ohio Seed Improvement Association by the dates shown below. For all applications filed or postmarked later than the ADue Date, a penalty of 1% of the inspection fees per day will be assessed up to a maximum of 10%. Example: 5 days delay would cost a 5% penalty; 10 days, 10%, etc.

Crop	Postmark Due Date
Wheat, spelt applications	May 1
Oats, barley applications	May 15
Sweet clover, alfalfa, white clover, crownvetch and flat pea applications	June 1
Timothy, bromegrass, fescue, and deer tongue applications	June 1
Corn applications & Round Up Ready ⁷ Soybeans	June 15
Red clover and Birdsfoot trefoil applications	July 1
Soybean applications	July 1

Double Crop Soybean and Herbicide Spray Reports and applications due within 7 days of planting date.

Annual Membership Fee is determined by the Board of Directors.

A **Field** is defined as an area occupied by one crop which is covered by one application (or isolation), and/or inspection report, and is undivided by fences, ditches (sod waterways excepted), highways, public roadways, other crops (strips within a given area excepted) or natural barriers.

Refunds - If a field is rejected at any field inspection, one half the acreage fees will be refunded. If a field is withdrawn before the initial inspection trip, fees will be refunded. There will be no other refunds.

OHIO SEED CERTIFICATION STANDARDS AND PROCEDURES

These general standards are applicable to all crops, and together with those specified for individual crops, shall constitute the minimum seed certification standards of The Ohio Seed Improvement Association.

1. Certifying Agency

- (A) The Ohio Seed Improvement Association, Incorporated (OSIA) is hereby designated the Certifying Agency for Certified, Registered, Foundation, and Breeder seed produced in Ohio. Certifying Agency means the Ohio Seed Improvement Association, Incorporated. Services supplied by the Certifying Agency shall be rendered only to those individuals who fully comply with Certification rules and pay all fees applicable to certification.
- (B) The Certifying Agency shall supply each person to whom it issues certification labels for Certified, Registered, Foundation or Breeder seed with a copy of OSIA Certification standards and procedures.
- (C) The Certifying Agency shall issue certification labels only to those persons who, have complied with standards and procedures.
- (D) The Certifying Agency shall effect compliance with the standards and procedures as adopted by the OSIA Board of Directors with respect to production, processing, packaging, and labeling of all agricultural seed for which certification has been requested.

2. Definitions

- A) The term variety (cultivar)- means an assemblance of cultivated individuals which are designated by any characters, (morphological, physiological, cytological, chemical or others), significant for the purposes of agriculture, forestry, or horticulture and which, when reproduced (sexually or asexually) retain their distinguishing features.
- (B) Other varieties- means plants or seed of the same kinds that can be differentiated from the variety that is being inspected, but shall not include variations which are characteristics of the variety as defined by the breeder.
- (C) Off-Types- means plants or seeds which do not conform to the description of the characteristics of a variety as defined by the breeder.
- (D) Proprietary variety- means one for which a person or company has exclusive

- production and/or marketing rights.
- (E) Conditioning- means all procedures for preparing seeds for planting after it has been harvested and prior to delivery to the person who will plant it.
- (F) Protected variety- means a person or a company that has filed application for protection with the United States Plant Variety Protection Office.
- (G) Tested Class- means propagating materials that shall be the progeny of plants whose parentage has been tested and has proven genetic superiority or possesses distinctive traits for which the heritability is stable, as defined by the certifying agency, but for which a variety has not been named or released. This seed must be produced so as to assure genetic purity and identity from either: rigidly controlled and isolated natural stands or individual plants, or seed fields or orchards.
- (H) Selected seed- means a class of seed or plant propagules which shall be the progeny of rigidly selected trees or stands of untested parentage that have promise not proof of genetic superiority, and further for which geographic source and elevation shall be stated on a certification label.
- (I) Source Identified- means a class of seed or plant propagules: (1) natural stands with known geographic source and elevation; or (2) a plantation of known geographic location, or as specified in the standards of the various certifying agencies.
- (J) Plant Breeder- means a person or organization actively engaged in the breeding and maintenance of varieties of plants.
- (K) Inbred line- means a relatively true-breeding strain resulting from at least five successive generations of controlled self-fertilization or of backcrossing to a recurrent parent.
- (L) Single cross- means the first generation of cross of two inbred lines, an inbred line and a foundation backcross, or of two foundation backcrosses.
- (M) Foundation Single Cross- means a single cross used in the production of foundation backcrosses or of double, three-way, or top crosses.
- (N) First generation foundation backcross- means the first generation cross between a foundation single cross of related inbred lines and an inbred line which shall be the same as one of the inbreds in the foundation single cross.
- (O) Second generation foundation backcross- means the cross of a first generation backcross (ear parent) with its recurrent inbred parent (pollen parent).
- (P) Double cross- means the first generation hybrid between two foundation single crosses.
- (Q) Top cross- means the first generation of a cross between an open pollinated variety and an inbred line, a foundation backcross, or a foundation single cross.
- (R) Open-pollinated seed- means seed produced as a result of natural pollination.

- (S) Variant- means any seed or plant which (1) is distinct within the variety but occurs naturally in the variety; (2) is stable and predicable with a degree of reliability comparable to other varieties of the same kind, within recognized tolerances, when the variety is reproduced or reconstituted; and (3) was originally a part of the variety as released. A variant is not an off-type.

Some variants may be trivial and of no harm or agronomic benefit to the variety and it would not be economically feasible for the breeder to purify the strain for these variants. The presence of these variants should be noted by the breeder when describing the variety but need not establish a definite frequency for their occurrence. They should not be considered as an identifying character in field or seed inspections. Other variants may be considered by the breeder to be agronomically important and/or as aids in identifying the variety. These variants should be described by the breeder including the expected frequency of occurrence. Characteristics subsequently identified in the variety which were unknown or unobserved at the time of variety release may be later described and designated as variants by the breeder if shown to be present in the variety as released.

For labeling purposes (field and or seed inspection) the tolerances in table eleven in Rules for Testing Seeds (AOSA), Journal of Seed Technology, Volume 6 ,Number 2, 1981, are to be applied to the level of the variants specified by the breeder of the variety. For seed law enforcement purposes, the tolerances in table eleven are to be applied to the level of the variants plus the tolerance applied when labeling.

3. Ohio Crop Variety Review Board

- (A) The Ohio Crop Variety Board is hereby established to determine the eligibility of varieties which have not been submitted to national variety review boards or which have not been released by universities. The AOhio Crop Variety Review Board- shall be composed of six members.
- (B) The following two members shall be appointed by the Vice President of the College of Food, Agricultural and Environmental Sciences at Ohio State University.
1. One representative of the research staff from the Horticulture and Crop Science Department (not a plant breeder);
 2. One plant breeder from the Horticulture and Crop Science Department.
- (C) The following two members shall be appointed by the Director of Agriculture based on recommendations from the appropriate organizations:
1. One representative of the Ohio Department of Agriculture;

- 2. One representative of the Ohio Seed Improvement Association, Inc.
- (D) The four members listed above will serve 4-year terms.
- (E) The following two members will serve as permanent members of the board:
 - 1. Manager of the Ohio Seed Improvement Association, Inc., who shall serve as permanent secretary;
 - 2. Manager of the Ohio Foundation Seeds, Inc.

4. Eligibility Requirements for Certification of Crop Varieties

- (A) The certifying agency shall in accordance with section 201.68 of the Federal Seed Act Regulation accept as eligible for certification any variety of seed which;
 - 1. Is released by the Ohio Agricultural Research and Development Center; or
 - 2. Is recommended by the Crop Variety Release and Distribution Committee; or
 - 3. Has been accepted for certification by any member agency of the AAssociation Official Seed Certifying Agencies; or
 - 4. Is registered with the Crop Science Society of America or the American Society for Horticultural Science; or
 - 5. Is determined to be eligible by the Ohio Crop Variety Review Board.
- (B) The AOhio Crop Variety Review Board may, in accordance with section 201.68 of the Federal Seed Act Regulations, consider the eligibility for certification of any variety which is not eligible under provisions of paragraph (A) of this rule only if a breeder, institution, or organization:
 - 1. Requests certification of said variety in writing; and
 - 2. Describes and documents in the request those characteristics of the variety which give it distinctiveness and merit.
- (C) The AOhio Crop Variety Review Board shall:
 - 1. Develop standards for acceptance of any variety or hybrid for certification.
 - 2. Notify the sponsor of any variety referred to in paragraph (B) of this rule in writing of their action concerning the eligibility of the variety for certification.
- (D) After a variety is declared eligible for certification through procedures prescribed in paragraph (B) of this rule and prior to acceptance for certification:
 - 1. The sponsor of said variety shall submit to the certifying agency a sample of seed of any generations requested by the certifying agency;
 - 2. The agency shall retain the sample to provide an appropriate control against which further releases of seed of the same generation or generations may be tested to verify varietal characteristics.
- (E) The certifying agency shall notify the sponsor of any variety referred to in paragraph (B) of this rule concerning the acceptance of the variety for certification.
- (F) The Ohio Crop Variety Review Board may declare ineligible any variety which

would otherwise be eligible under provisions of paragraphs (A) (3) and (A) (4) of this rule.

- (G) The certifying agency shall require the originator, developer, or owner of the variety, or agent thereof, to make the following available when eligibility for certification is requested:
- (1) The name of the variety.
 - (2) A statement concerning the variety's origin and the breeding procedure used in its development.
 - (3) A detailed description of the morphological, physiological, and other characteristics of the plants and seed that distinguish it from other varieties.
 - (4) Evidence supporting the identity of the variety, such as comparative yield data, insect and disease resistance, or other factors supporting the identity of the variety.
 - (5) A statement delineating the geographic areas of adaptation of the variety.
 - (6) A statement of the plans and procedures for the maintenance of seed classes, including the number of generations through which the variety may multiply.
 - (7) A description of the manner in which the variety is constituted when a particular cycle of reproduction or multiplication is specified.
 - (8) Any additional restrictions of the variety, specified by the breeder, with respect to geographic area of seed production, age of stand or other factors affecting genetic purity.
 - (9) A sample of the seed representative of the variety as marketed.

5. Acceptance of a Variety for Certification

- (A) All varieties declared eligible for certification shall be accepted or rejected for certification by the Board of Directors of the certifying agency.
- (B) The Ohio Crop Variety Review Board may terminate the eligibility for certification of any variety of seed which has been accepted for certification by the certifying agency if:
- (1) The variety was misrepresented, either intentionally or unintentionally, at time it was accepted for eligibility; or
 - (2) The variety is changing; or
 - (3) The variety becomes susceptible to a new pest or a new race of a pest to such an extent that it could act as a reservoir for that pest; or
 - (4) The variety is found to be detrimental to Ohio's agriculture by the Board because it lowers the value of crop products with which it is normally mixed:
or
 - (5) No one has requested certification of the variety in two years immediately preceding their action.

6. Classes and Sources of Certified Seed

- (A) The certifying agency shall recognize and may certify four classes of seed, namely: **BREEDER, FOUNDATION, REGISTERED** and **CERTIFIED**.
1. Breeder seed means seed or vegetative propagating material which is directly controlled by the originating or the sponsoring plant breeder, institution, or firm which supplies the source for the initial increase of **FOUNDATION** seed. It may also serve as the source for all classes of **CERTIFIED** seed.
 2. Foundation seed means the progeny of **BREEDER** or of **FOUNDATION** seed which has been so handled as to most nearly maintain specific genetic identity and purity, and which has been certified by the certifying agency.
 3. Registered seed means the progeny of **BREEDER** or **FOUNDATION** seed which is so handled as to maintain established standards of genetic identity and purity, and which has been certified by the certifying agency.
 4. Certified seed means the progeny of **BREEDER, FOUNDATION, or REGISTERED** seed which is so handled as to maintain satisfactory genetic identity and purity and which has been certified by the certifying agency, except that the certifying agency may, with the permission of the originating or sponsoring plant breeder or his designee, permit:
 - (a) Recertification of the **CERTIFIED** class for older crop varieties of which **FOUNDATION** seed is not being maintained;
 - (b) The production of an additional generation of **CERTIFIED** seed on a one-year basis when an emergency is declared by the certifying agency stating that **FOUNDATION** and **REGISTERED** seed supplies are not adequate to plant the needed acreage of the variety. The certifying agency shall obtain the consent of the originating, or sponsoring plant breeder, institution, firm, or owner of any variety for which a limitation on the number of generations exists. The additional generation of **CERTIFIED** seed to meet the emergency need is ineligible for recertification.
- (B) The number of generations through which a variety may be multiplied shall be limited to that specified by the originating breeder or owner of a variety, but shall not exceed two generations beyond **FOUNDATION** seed, except as provided in paragraph (a) (4) (a) and (b) of this rule.

7. Seed Sources

- (A) Each applicant for certification of **FOUNDATION, REGISTERED, or CERTIFIED** seed shall supply evidence, which is satisfactory to the certifying agency, to establish the class and source of such seed.

- (B) The certifying agency shall accept no application for certification of a proprietary variety unless it is signed or co-signed by the owner of the variety.

8. Handling of Crop Prior to Inspection

The grower will be responsible for the cleaning of all planting or other equipment used in the field prior to harvesting and including harvest equipment. All roguing of off-type plants, crops and weeds should be done prior to field inspection to lessen chances for rejection. If rejected and reinspection is requested, all roguing shall be done prior to reinspection.

9. Field Inspection

- (A) One or more field inspections of each field for which an application has been received shall be made prior to harvest at a time when genetic purity and identity can best be determined. The field shall be in a condition to ensure that an adequate inspection to determine genetic purity and identity is accomplished.
- (B) The certifying agency shall assign inspections which require technical training only to individuals who have been trained.
- (C) The inspector shall cross each field sufficiently to evaluate accurately the factors affecting the eligibility for certification.
- (D) The inspector shall reject fields for certification failing standards established for each type of crop.
- (E) Reinspection of rejected fields can be performed upon request from the member. Roguing of fields prior to re-inspections is encouraged.

10. Unit of Certification

The unit of certification shall be a clearly defined area, which may be divided subject to special regulations for individual crops.

11. Harvesting, Conditioning and Storing

One or more inspections of harvested lots of seed from inspected fields may be made at any time by representatives of the certifying agency who shall have authority to reject for certification any lot not properly protected from mixture, improperly identified, or which fails to meet purity or quality standards. The grower and/or conditioner is responsible for proper cleaning of all harvesting and conditioning equipment and storage facilities and must ensure that the identity and varietal purity of the seed between harvest and labeling have been maintained.

- (A) Conditioning

- (1) Harvesting and storing seed for certification must be done so that the life of the seed is protected. Harvesting equipment must be cleaned and properly adjusted by the applicant and operated to keep mechanical injury at a minimum. Moisture content of the seed must be considered for proper harvesting and storage. All lots of each variety of unconditioned seed must be properly labeled. The applicant is responsible to see that the storage is clean.
- (2) Conditioning equipment is an essential part of a good seed program. Ownership or direct control of complete conditioning machinery is recommended. When conditioning certified seed the applicant is required to see that the equipment is thoroughly cleaned and properly adjusted during its operation. To be eligible for certification, seed shall be conditioned by one of the following:
 - (a) Producers own equipment
 - (b) Plant approved by certifying agency, such a plant may be:
 - (I) Another Producers equipment,
 - (II) A commercial seed conditioning plant
 - (3) Conditioning seed - the following requirements must be met by conditioners of certified seed:
 - (a) Facilities shall be available to perform conditioning without introducing admixtures.
 - (b) Identity of the seed must be maintained at all times.
 - (c) Records of all operations relating to certification shall be complete and adequate to account for all incoming seed and final disposition of seed.
 - (d) Conditioners shall permit inspection by the certifying agency of all records pertaining to certified seed.
 - (e) Conditioners shall designate an individual who shall be responsible to the certifying agency for performing such duties as may be required.
 - (f) Each owner of a proprietary variety shall specify by which approved conditioning plant (s) the variety shall be conditioned. The certifying agency shall refuse certification of any seed of a proprietary variety which appears for conditioning in any plant other than the approved plant(s) which is specified by the owner.
 - (g) Seed lots of the same variety and seed class may be blended and the seed class retained. If lots of different classes are blended the lowest class shall be applied to the resultant blend. Such blending can only be done as authorized by the certifying agency.
- (B) Transfer of ownership of unconditioned seed
 - (1) When a grower sells unconditioned seed to a conditioner for completion of certification, the grower must:
 - Supply the certifying agency, in writing, on supplied forms, a record showing the date, amount, kind, variety, and class of seed transferred.

- (C) Bulking of seed of the same variety produced in different fields.
Seed from different fields of the same variety may be binned and conditioned as one lot.
- (D) Size of lots
The conditioned seed should be divided into lots so that each lot is uniform throughout. The size of a cleaned lot shall not exceed 5,000 bushels.
- (E) Samples and sampling of seed.
 - (1) The certifying agency shall certify only lots of seeds from which one or more representative samples of cleaned seed have been obtained, examined, and found to comply with OSIA Certification Standards and Procedures.
 - (a) Sampling
It is important that a true representative sample taken from each lot of seed as it is to be offered for sale and submitted to the certifying agency.
 - (I) For lots of one to six bags, sample each bag.
 - (II) For lots of more than six bags, sample five bags plus ten percent of the number of bags in the lot to a maximum of thirty bags.
 - (III) Bulk seed - take at least as many cores or handfuls as if the same quantity of seed were in bags of an ordinary size lot. Take the samples from well-distributed points throughout bulk.
 - (b) The size of sample depends upon the crop and is specified for each commodity in the seed certification standards.
 - (2) The certifying agency may:
 - (a) Take any sample of seed which it deems necessary to determine eligibility for certification;
 - (b) Reject for certification any seed not properly protected from mixture or not properly identified as to variety;
 - (c) Take samples of lots of seed in the possession of the conditioner for which certification tags have been issued. If analysis of such samples shows that the lot from which it was taken, or a portion thereof, does not meet or exceed the minimum standards for certification, the certifying agency may demand the return of all tags issued for the particular lot of seed, or a portion thereof, in the possession of the conditioner, and upon demand, the conditioner shall return such tags.

12. Seed Testing

The certifying agency shall have samples of seed analyzed and tested in accord with the procedures prescribed by the most recent edition of ARules For Testing Seed issued by the Association of Official Seed Analysts, or amendments thereto.

13. Rejection of Fields and Seed Lots

- (A) The certifying agency may reject for certification any field which does not show evidence of good management including, but not limited to, reasonable precautions for weed control such as spraying with an effective material, selection of field, or other generally accepted methods of effective weed control.
- (B) The certifying agency may reject any seed lot because of tests or observation which indicate poor quality such as, but not limited to, immaturity, low bushel weight, weathering, seed coat damage, disease, and processing injury.

14. Bags, Containers and Bulk Seed

- (A) All Certified, Registered or Foundation seed shall be placed in new bags or clean bags.
- (B) Seed within the classes as stated in part (A) may also be placed in large containers, commonly referred to as bulk bags or jumbo bags. Reuse of these containers shall be permitted only if the containers are constructed so they are self cleaning to prevent contamination from any other crop or variety.
- (C) Certified, Registered or Foundation classes of seed may be sold in the bulk.
- (D) Certified seed sold in bulk bags must bear a certification label or have a bulk transfer or bulk retail sales certificate to accompany such seed.
- (E) Bulk bags shall have attached a complete analysis label as required by Ohio Seed Law.

15. Labeling and Sealing (Bulk and Bagged)

- (A) The conditioner, or a representative of the certifying agency, shall affix an official certification label to each bag or container of certified seed of any class.
- (B) No person shall offer for sale any certified seed of any class unless an official label is properly affixed to the container. The label shall clearly identify the certifying agency, the lot number, kind, variety and the class of seed.
- (C) Seed of the Foundation, Registered or the Certified class may be offered for sale in the bulk provided:
 - (1) Seed of the Foundation and Registered class may be eligible for recertification only if sold by the applicant producer directly to another applicant producer. A maximum of one sale is permitted.
 - (2) Seed of the certified class may be sold by the producer or

- by an approved retail facility. A maximum of two sales is permitted:
- (a) A producer to an approved retailer or consumer:
 - (b) An approved retailer to a consumer.
- (3) Compliance is met for all field and seed standards applying to bagged seed.
 - (4) A bulk sales certificate issued by the certifying agency, shall take the place of the certified, registered, or foundation seed label placed on bags or containers. The buyer shall received a Abulk sales certificate for each load of bulk certified, registered or foundation seed purchased. The Abulk sales certificate shall identify the certifying agency, the crop kind, the variety, class of seed and the lot number.
- (D) The certifying agency shall issue official seed certification labels which are rectangular with a length to width ratio of approximately 2:1. The labels shall be of the following colors:
 - (1) White for breeder or foundation seed
 - (2) Light purple for registered seed
 - (3) Light blue for certified seed
 - (4) Blue for Tested Class
 - (5) Green for Select Class
 - (6) Yellow for Source Identified Class
 - (E) Each bag or container of certified seed of any class, sold or offered for sale, shall have attached to or printed on the bag or container, analysis information as required by Ohio Seed Law. All bulk seed sold shall also be required to have analysis information on an attached label or printed on the Abulk sales certificate.
 - (F) Each bag or container of certified seed sold, shall be sealed to prohibit entry from any contaminant. Methods of sealing shall be approved by the certifying agency.
 - (G) The Certifying Agency shall have the authority to audit all records related to bulk seed and to inspect the facility of any producer or retailer who sells certified or registered seed in bulk.

16. Interagency Certification

Interagency certification means the participation of two or more member agencies of the Association of Official Seed Certifying Agencies (AOSCA) in performing the services required to certify the same lot or lots of seed. The methods and standards employed in each step of the interagency certification process are those used when certification is completed by a single agency with the following exceptions:

- (A) The certifying agency issuing the labels may apply the standards of the agency under which the seed was field inspected, provided those standards meet the minimum standards as they appear in Table V of the Federal Seed Act Regulations for the kind and variety in question.
- (B) Seed to be recognized for interagency certification shall be received in containers carrying official certification labels or evidence of its eligibility from another

certifying agency including the following:

- (1) Variety and Kind
 - (2) Amount of seed (pounds or bushels)
 - (3) Class of Certified seed
 - (4) Inspection or lot number traceable to a certifying agency's records.
- (C) Each label used in Interagency certification shall be serially numbered or carry the identification identity number, and clearly identify the certifying agencies involved, the variety, kind and class of seed.

17. Complying With National and State Laws

- (A) Responsibility for any obligation arising from the sale or shipment of seed which has been certified rests with the applicant or subsequent handler making the sale or shipment.
- (B) Responsibility for compliance with the Seed Law labeling requirements for the country, state, or province into which seed is shipped rests with the labeler and or seller.

18. Verification Plantings

The certifying agency will have the option to conduct grow-out or post control tests for the major crops in the certification program to determine if genetic purity and identity are maintained at all stages by the certified seed applicant.

19. Applicants or Vendors Responsibility

Responsibility for the compliance with certification requirements rests with the individual or concern whose number is printed on the certification tag.

20. Marketing

- (A) The Association office aids its members in marketing seed and prospective buyers in locating sources of certified seed by means of current seed lists. The Association office does not sell seed. The responsibility of selling rests strictly with the individual applicants.
- (B) Each member of the Association who produces and sells certified seed is required to keep a record of all certified seed sales. As required by the Ohio Seed Law, of the revised code, these records shall show lot number, kind and variety, origin germination, purity, treatment, and the labeling of each lot including a file sample. This information shall be kept for two years. Failure to supply these records upon

request from a representative of the certifying agency or to give satisfactory cause for failure automatically forfeits an applicant's privilege of producing certified seed.

21. Varietal Blends

- (A) The components of a blend must have met all field and seed (laboratory) requirements for certification previous to blending. Only certified seed of each of the component varieties shall be used in a seed blend.
- (B) The components and their proportions within the blend shall be recorded in the files of the AOhio Seed Improvement Association. The components and their proportions shall not vary between lots or between years.
- (C) A given component of a blend shall be not less than fifteen percent of the whole on a weight basis. The sampling tolerance limits of each component shall not exceed plus or minus five percent of the whole also, on a weight basis. No more than four components (varieties) may be used in a given blend.
- (D) Permission to use a private variety in a blend must be secured in writing from the Breeder or owner of that variety and supplied to the certifying agency.
- (E) The blend shall be accepted by the Certification committee and presented to the Board of Directors for final approval.
- (F) Only active members approved by the AOhio Seed Improvement Associations Board of Directors may blend varieties to be sold as certified seed.
- (G) The lot size of a given blend shall not exceed one thousand bushels.
- (H) Any additional expenses (above normal certification costs) incurred for blending, sampling, testing, etc. in the certification of blends shall be paid for by the member making the blend.
- (I) The certification tag shall carry the following information:
 - Blend and crop
 - Lot number
 - Producer number
 - Processor number
 - (if different than the producer)

The member listed affirms that the seed to
Which this tag is attached is a blend of vari-
eties that have passed field and seed certifica-
tion requirements of the AOhio Seed Improvement
Association. Varieties involved in blend are:

**CERTIFICATION STANDARDS FOR
WHEAT, OATS, RYE, BARLEY, SPELT, TRITICALE AND SMALL GRAINS**

1. Field Standards

- (A) The unit of certification of small grains is a field.
- (B) The certifying agency shall certify no field of small grain:
 - (1) In which the same kind of crop was grown during the previous year unless the previous crop was grown from certified seed of the same variety.
 - (2) Which is not separated from each other field of the same crop or a crop of the same season by a distance sufficient to prevent mechanical mixture.
- (C) Each applicant for certification of a small grain shall dispose of all grain from a rejected field, or from the rejected portion(s) of a field, in such a manner that it cannot be used as certified seed.
- (D) Any field of small grain is ineligible for certification if the field inspector reports the presence of other varieties or off-types in excess of the below stated maximums.
- (E) A field producing any class of certified seed of rye must be isolated by at least six hundred sixty feet from rye fields of any other variety or fields of the same variety that do not meet the varietal purity requirements of the class of seed inspected and are of the same chromosome number. Isolation between diploid and tetraploid rye shall be at least fifteen feet.

**MAXIMUM PERMITTED
IN EACH CLASS
(Number of heads)**

	Foundation Registered Certified		
Other varieties or off-types	.0125%	.05%	.1%
	(1/8000)	(1/2000)	(1/1000)

2. Samples and Sampling of Seed

Each producer shall submit a two-pound sample representing each lot of his cleaned small grain seed which is eligible for certification to the certifying agency for laboratory analysis.

3. Seed Standards

- (A) The certifying agency shall certify no lot of seed wheat, spelt, barley, rye or triticale which contains seed of off-types or other varieties in excess of the stated maximums:

MAXIMUM PERMITTED IN EACH CLASS (Number of seeds)			
	Foundation	Registered	Certified
Other varieties or off-types	None	.05% (1/2000)	.1% (1/1000)

- (B) The certifying agency shall certify no lot of seed oats which contains seed of off-types or other varieties in excess of the stated maximums:

MAXIMUM PERMITTED IN EACH CLASS (Number of seeds)			
	Foundation	Registered	Certified
Other varieties or off-types	0.2% (2/1000)	.3% (3/1000)	0.5% (5/1000)

4. Varietal Blends

- (A) All small grain varietal blends shall be subject to the varietal blend specifications as set forth in the OSIA Certification Procedures and Standards.
- (B) A small grain varietal blend shall have been tested for a minimum of two years in its area of adaptation with a minimum of three replications per test. The performance tests shall include appropriate check varieties which are used extensively in the area of adaptation of the blend. For every year of testing the procedures shall be comparable to public experiment station trials as approved by OSIA. The data shall be available to OSIA.

CHEMICALLY ASSISTED HYBRID WHEAT CERTIFICATION STANDARDS

1. APPLICATION OF GENETIC CERTIFICATION STANDARDS

(A) The Genetic Certification Standards in the Ohio Seed Certification Standards and Procedures are basic.

(B) The Genetic Standards are modified as follows:

1. Section b. Designation of Classes of Seed
 - a. A commercial hybrid is one to be planted for any use except seed production.
 - b. Only the class Certified is recognized in the production of commercial hybrid seed.
 - c. Commercial hybrids can be produced by using any class of certified seed for both seed and pollen parents.
2. Production of Seed – The crossing fields shall be given at least two (2) field inspection follows:
 - a. When seed parent is receptive
 - b. At seed set

II. LAND REQUIREMENTS

Crossing blocks must be planted on land free of volunteer contaminating plants

III. FIELD STANDARDS

(A). General

1. Isolation

A specific hybrid to be accepted for certification must be so located that the seed parent is not less than 100 feet from a contaminating field of wheat of another variety.

The 100 foot minimum may be modified by planting pollen parent border rows as shown in the following table. A 50 foot wide pollen parent border is adequate isolation from contaminating wheat.

ISOLATION TABLE

Pollen Parent Border (Feet)	Open Space or Other Crop (Feet)	Total Isolation (Feet) Seed Parent to Other Wheat
(A)	(B)	(A + B)
0	100	100

10	80	90
20	60	80
30	40	70
40	20	60
50	0	50

2. Interplanted Blocks

a. Interplanted Blocks of seed parent and pollinator shall be separated by an unplanted strip of ground adequate to prevent mechanical mixture.

B. Specific

The seed parent and pollinator shall meet the following:

Maximum Permitted - Ratio Heads		Certified
Factor		
Other Varieties or off types		1:1000

IV. SEED STANDARDS

Factor	Certified
Pure seed – includes female parent (minimum)	96.00%
Inert matter (maximum)*	4.00%
Total other crop seeds (maximum)	0.25%
Other varieties other than the female parent (maximum)	0.20%
Other Kinds (maximum)***	0.05%
Germination (minimum)	85.00%
Diseases****	-

*Shall not contain more than 2% inert matter other than broken seed.

**For other small grains the maximum of 5 per pound must not be exceeded. This does not apply to seeds of winter grains in spring grains and vice versa, except in areas where climate conditions do not take care of the situation.

***If chemically controllable seed-borne diseases are noted upon field inspection or laboratory observation, seed treatment is recommended.

V. DETERMINING PERCENT HYBRIDIZATION

The percent hybridization must be in accord with federal and state seed laws, and must be determined for final certification as follows:

- a. Field samples from bagged and unbagged seed parent heads from the production field; or
- b. Other methods which determine the percent hybridization approved by the certifying agency.

**CYTOPLASMIC MALE STERILE HYBRID WHEAT
CERTIFICATION STANDARDS**

1. Application of Genetic Certification Standards

- (A) The Genetic Standards are as follows:
 - (3) Eligibility Requirements for Varieties.
Standards applicable to specific crop varieties shall apply to the production of pollinator lines.
 - (4) Designation of Classes of Seed.
 - (a) Commercial hybrid is one to be planted for any use except seed production.
 - (a) Only the class Certified is recognized in the production of commercial hybrid seed.
 - (c) A commercial hybrid that is to be certified must be produced from seed stocks approved by the certifying agency. These seed stocks shall consist of male steriles, inbred lines, and/or hybrids, and be any class of Certified seed for both pollen and seed parents.
 - (1) Production of Seed
The crossing fields or parts of fields producing hybrids or maintaining male sterile lines shall be given at least three field inspections as follows:
 - (a) Before bloom to determine isolation, presence of volunteer plants, early appearing out-crosses, and planting ratios.
 - (b) During bloom, preferably at full bloom.
 - (c) After heads begin to assume mature color.
 - (d) The entire crossing field grown by and/or belonging to an applicant and used for seed must be inspected.

2. Land Requirements

- (1) Pollinator lines shall be planted on land on which the previous crop was another kind or was planted with a class of certified seed of the same variety or lines. Pollinator lines will not be eligible for certification if planted on land on which the same kind of crop was grown the previous crop year unless the previous crop was grown from a certified class of seed of the same variety or lines.

- (2) Production of the sterile lines and crossing blocks must be on land free of volunteer contaminating plants.

3. Field Standards

- (1) Isolation
 - (a) Seed Parents

Fields or parts of fields acceptable for production of female parents to be used for the production of seed of a hybrid must be so located that the female parent is not less than 100 feet from fields of other kinds or varieties which would provide a source of contamination, or from fields of the same variety that do not meet varietal purity requirements for certification. The 100 foot minimum may be modified by planting pollen parent border rows as shown in the following table. A 50 foot wide pollen parent border is adequate isolation from contaminating wheat.

ISOLATION TABLE		
Pollen Parent Border Feet (A)	Open Space or Other Crop Feet (B)	Total Isolation Distance (Feet) Female Parent to Other Wheat (A + B)
0	100	100
10	80	90
20	60	80
30	40	70
40	20	60
50	0	50

- (b) Commercial Hybrids - The requirements for female parent shall apply.
- (c) Inter-planted blocks
Inter-planted blocks of male sterile and pollinator lines shall be separated by an unplanted strip of ground adequate to prevent mechanical mixtures.

- (B) Specific
 - (1) Pollen Shedding by Female Parent

Maximum heads shedding pollen
permitted at any field inspection

Female Parent

Commercial
Hybrid

*Foundation Female	1:20	
*Registered Female Parent	1:100	
*Certified Female Parent	1:50	
Certified Production Fields (Seed Parent x Restorer)		1:50

*When the female parent is increased outside the area of the anticipated A x R production in order to utilize self-fertility produced by environmental effects, only isolation and genetic purity standards will be in effect.

(1) The female parent and the pollinator shall meet the following:

Factor	Maximum Permitted - Ratio of Heads			
	Seed - Parent Foundation	Registered	Commercial Hybrid Certified	Certified
Other Varieties	1:3000	1:2000	1:1000	1:1000

4. Seed Standards

		Female Parent			Commercial Hybrid
		Foundation	Registered	Certified	Certified
Pure Seed (Minimum)	-	96.00%	96.00%	96.00%	
*Inert Matter (Maximum)	-	4.00%	4.00%	4.00%	4.00%
**Objectionable Weeds (Maximum)	None	None	None	None	None
***Total Other Crop Seeds (Max.)	0.06%	0.12%	0.25%	0.25%	0.25%
Other Varieties (Maximum)	0.05%	0.10%	0.20%	0.20%	0.20%
Other Kinds (Maximum)	0.01%	0.02%	0.05%	0.05%	0.05%
Germination (Minimum)	85.00%	85.00%	85.00%	85.00%	85.00%
****Diseases	-	-	-	-	-

*Shall not contain more than 2 percent inert matter other than broken seed

**Objectionable weeds are designated by the certifying agency.

***For other small grain the maximum of 1 per pound in Foundation, 2 per pound in Registered, and 5 per pound in Certified must not be exceeded, but this does not apply to seeds of winter grains in spring grains and vice versa, except in areas where climate conditions do not take care of

the situation.

***If chemically controlled seed-borne diseases are noted upon field inspection or laboratory observation, seed treatment is recommended.

CERTIFICATION STANDARDS FOR CORN

1. Definitions

As used in Regulations inclusive:

Crop Categories:

- (A) Hybrid corn is seed to be planted for any use except seed production. It may be any one of the following:
 - (1) A single cross, i.e., the first generation of a cross of two inbred lines, an inbred line and a foundation backcross or two foundation backcrosses.
 - (2) A three-way cross, i.e. the first generation of a cross of foundation single cross and inbred line or foundation backcross.
 - (3) A double cross, i.e., the first generation of a cross between two foundation single crosses.
 - (4) A top cross, i.e., the first generation of a cross of an open pollinated variety and an inbred line, a foundation backcross, or a foundation single cross.
- (B) Foundation Single Cross - to produce a foundation backcross, double, three-way, or top cross hybrids. A foundation single cross to be eligible for certification must be produced from approved inbred lines or Foundation back crosses, whose source assures their identity and is approved by the certifying agency.
- (C) Foundation backcross to produce double, three-way or top cross hybrids. A foundation backcross to be eligible for certification must be produced from approved single crosses and inbred lines whose source assures their identity and is approved by the certifying agency.
- (D) Inbred Lines
 - (1) An inbred line to be eligible for certification must be from a source such that its identity may be assured and approved by the certification agency.
 - (2) An inbred line used as a pollinator in a foundation single cross or foundation backcross in isolation may be certified provided all the seed parents in the isolated field are inspected for certification and meet all field requirements for certification.

Class Categories:

- (A) Only the class a Certified is recognized in hybrid corn.
- (B) Hybrid corn must be produced from certified foundation seed.
- (C) Foundation Backcrosses

- (1) A first generation foundation backcross shall be the first generation cross between a foundation single cross of related inbred lines and an inbred line which shall be the same as one of the inbreds in the foundation single cross.
- (2) A second generation foundation backcross shall be the cross of a first generation backcross (ear parent) with its recurrent inbred parent (pollen parent).
- (D) A foundation single cross shall consist of the first generation hybrid between two inbred lines, an inbred line and a foundation backcross or two foundation backcrosses.
A fertility restoring line may be substituted for its non-restoring counterpart in a foundation single cross or foundation backcross provided the fertility restoring line is the same in other observable characteristics as its non-restoring counterpart.
- (E) A inbred line must be a relatively true breeding strain of corn resulting from controlled self-fertilization or a backcrossing to a recurrent parent with selection or its equivalent.
 - (1) When a specific genetic factor(s) is added to an inbred line, the line must have been backcrossed to its recurrent parent at least five generations. The line must be homozygous for the specific genetic factor(s) except for the pollen restoration factor(s) and the genic male sterile maintainer line.
 - (2) For a recovered pollen restorer inbred line, selection must be relative to a specific cytoplasmic male sterile source.
 - (3) A genic male sterile maintainer line, consisting of duplicate-deficient and male-steriles in an approximate 1:1 ratio, shall be no more than two generations removed from breeder seed. The maintainer shall be designated according to generation as:
 - (a) Breeder seed - The hand pollinated selfed seed from a known duplicate-deficient plant heterozygous at a particular male sterile locus.
 - (b) Foundation I seed - The product of random-mating among fertile plants arising from Breeder seed.
 - (c) Foundation II seed - The product of random-mating among fertile plants arising from Foundation I seed.
- (F) A genic male sterile line shall be a strain homozygous for a particular male sterile recessive allele and shall be closely related to its maintainer counterpart.
- (G) The genic male sterile lines may be identified as to the recessive genes they carry, e.g. B37 ms-1, N28 ms-10. The maintainer lines may be identified not only for the male sterile gene for which it is heterozygous, but for the specific translocation from which it is derived, e.g. B37 Mt-1 ms-1, N28 Mt-1 ms-10.

2. Field Standards

- (A) The unit of certification for corn shall be a field, but the certifying agency may approve a portion of a field for certification if the remainder of the field is harvested separately and the seed is excluded from certification.
- (B) One or more field inspections shall be made during the pollinating period. For OECD requirements are: 3-inspections must be made when the silks are receptive, one-inspection for isolation and one-inspection for freedom of volunteers from preceding crop.
- (C) Foundation single crosses, foundation backcrosses and inbred lines shall be ear inspected after maturity or grown in a winter grow-out test by the certifying agency.
- (D) Seed fields of inbred, foundation single cross, and hybrid production shall not be planted on land that has grown corn of another color or endosperm type the preceding season.

3. Labeling

Tag or label colors used for certified seed lots shall be:

- (A) White and black for Foundation tag
- (B) White and black for OECD Basic class
- (C) Blue for Certified Hybrids
- (D) Blue and Black for OECD Hybrids

FOUNDATION INBRED LINES

1. Eligibility of Inbred Lines

An inbred line to be eligible for certification must be from a source such that its identity may be assured and approved by the certifying agency.

2. Field Standards

- (A) An increase field of an inbred line, either male sterile or fertile, shall be isolated by not less than 660 feet from any other kind of corn. No isolation is required for the production of hand-pollinated seed.
- (B) In the case of inbred line seed production, the following exceptions may be considered when the contaminating field is of the same color and texture.
 - (1) Adequate natural barriers are permitted for modifying isolation distance.
 - (2) Differential maturity dates may permit modifying isolation distances

provided there are no receptive skills in the seed parent at the time pollen is being shed in the contaminating field.

- (3) Dent sterile popcorn requires no isolation from dent corn.
- (C) The certifying agency shall certify:
 - (1) No field of an inbred line of corn which contains, at any one inspection, more than one-tenth of one percent of definitely off-type plants which have shed pollen or are shedding pollen when five percent or more of the plants in the isolation have receptive silks.
 - (2) Seed produced by controlled hand pollination only when the technique of control was adequate to insure against stray pollen in excess of 0.1 percent.

3. Seed Inspection

- (A) The certifying agency may inspect lots of ears of inbred lines of corn after maturity.
- (B) The certifying agency shall not certify any lot of ears of inbred lines of corn which contain:
More than 0.1 percent (1 per 1000) of definitely off-type or more than 0.5 percent (5 per 1000) of ears with off-colored or different textured kernels which would not exceed a total of twenty-five off-colored seed or different textured kernels per 1000 ears.
- (C) Post harvest growout inspections will be accepted for Foundation corn production in lieu of an ear inspection.
- (D) A lot of seed of an inbred line of corn may be inspected for certification if it has been hand pollinated or meets the field inspection requirements. The certifying agency upon inspection and observation, may disqualify any specific lot of seed for further propagation of the line if the field performance has been, or may be reasonably expected to be unsatisfactory.

4. Seed Standards

To be eligible for certification:

- (A) Inbred lines need not meet a minimum pure seed, germination, or grading requirement.
- (B) A recovered fertility restoring inbred line of corn must have been back-crossed to its recurrent parent with selection for fertility restoration relative to a specific cytoplasmic sterile source for not less than five generations. The producer of the inbred line shall furnish proof or affidavit that the above requirement has been fulfilled. Proof of the fertility restoring ability of the line will be supplied by the originator.

FOUNDATION SINGLE CROSSES OF CORN

1. Eligibility of Single Crosses

A Foundation single cross to be eligible for certification shall have been produced from Certified inbred lines.

2. Field Standards

- (A) A production of a specific foundation single cross, or a foundation backcross involving either male sterile or fertile lines shall be isolated by not less than 660 feet from any other kind of corn. No isolation is required for the production of hand-pollinated seed.
- (B) In the case of foundation single cross and foundation backcross seed production, the following exceptions may be considered when the contaminating field is of the same color and texture.
 - (1) Adequate natural barriers are permitted for modifying isolation distance.
 - (2) Differential maturity dates may permit modifying isolation distances provided there are no receptive silks in the seed parent at the time pollen is being shed in the contaminating field.
 - (3) Dent sterile popcorn requires no isolation from dent corn.
- (C) An isolation will not be accepted for certification if more than 0.5 percent of seed parent plants have shed pollen on any one inspection or if the total of three inspections on different dates exceeded 1.0 percent.
- (D) Other varieties and off-type plants
 - (1) A field in which more than 0.1 percent definitely off-type plants in the pollen parent have shed pollen will not be certified.
 - (2) At the time of last inspection the seed parent shall not contain in excess of 0.1 percent definitely off type plants.
 - (3) Any plant shedding pollen in male sterile rows must be completely destroyed at pollination time to eliminate the possibility of its seed production.

3. Seed Inspection

- (A) The certifying agency may inspect lots of Foundation single crosses of corn after maturity.
- (B) The certifying agency shall not certify any lot of Foundation single cross if:
 - More than 0.1 percent (1 per 1000) of definitely off-type or more than 0.5 percent (5 per 1000) of ears with off-colored or different textured kernels which would not

exceed a total of twenty-five off-colored seed or different textured kernels per 1000 ears.

- (C) Post harvest growout inspections will be accepted for Foundation corn production in lieu of an ear inspection.

4. Seed Standards

- (A) To be eligible for domestic certification Foundation single crosses need not meet a minimum pure seed, germination, or grading requirement. OECD basic seed must meet a minimum germination and purity requirement to be reported on the OECD shipping certificate.
- (B) The certifying agency may disqualify any lot of seed for further propagation of Foundation single crosses if field performance has been, or may be expected to be unsatisfactory.

CERTIFICATION STANDARDS FOR COMMERCIAL CORN HYBRIDS

1. Eligibility of Commercial Corn Hybrids

- (A) The certifying agency shall recognize:
 - (1) Only the Certified class of commercial corn hybrids;
- (B) Each commercial hybrid to be eligible for certification shall represent a specific combination of genetic lines which meets the criteria that have been established by the Ohio Crop Variety Review Board and/or the Crop Variety Release & Distribution Committee.

2. Field Standards

- (A) Each field in which a commercial hybrid is to be produced to be eligible for certification shall be so located that the seed parent is not less than:
 - (1) 660 feet from any other corn of a different color or texture, regardless of size of field or intervening border rows;
 - (2) 660 feet from any other corn of the same color and texture, unless the certifying agency modifies this standard because of pollen-parent border rows which were planted in accordance with the following table. Other exceptions are listed in parts (3), (4), and (5).

Minimum distance from other Corn to the first seed parent plant - Feet -	Field Size*	
	to 20 acres	20 acres +
	(Minimum) border rows	
660	0	0
570	4	2
490	6	2
410	8	4
330	10	6
270	12	8
210	14	10
150	16	12
90	18	14
<90	24 ¹	16 ²

¹Minimum of 60 foot including border rows

²Minimum of 40 foot including border rows

*Different dates of planting will not divide a field for isolation purposes but may divide the field for detassling inspection.

- (3) Adequate natural barriers are permitted for modifying isolation distances.
- (4) Differential maturity dates are permitted for modifying isolation distances, provided there are no receptive silks in the seed parent at the same pollen is being shed in the contaminating field.
- (5) Dent sterile popcorn requires no isolation from dent corn.
- (B) The isolation distance required between a sweet corn pollen source and the seed parent may be administratively modified by the certifying agency based on the size of the sweet corn patch, maturity dates, and other factors.
- (C) Open Pollinated Corn
 - (1) Acreage to be certified must be so located that is not less than 660 feet from any other kind of corn, including pop corn and sweet corn, unless it is a field of the same variety being inspected for certification.
 - (2) The isolation distance may be modified, depending upon the size of the certifiable acreage, by adequate natural barriers and by designating certain rows of the same variety for pollen-shedding purposes only. The minimum isolation and border requirements for corn hybrids shall apply to open-pollinated corn.
 - (3) Rows that function to provide isolation shall not be harvested for seed purposes.
- (D) Specific

(3) Male Sterile Ear Parent

A male sterile ear parent can be used to produce certified hybrid corn seed by either of two methods.

a. Seed of the normal fertile ear parent must be mixed with the seed of the male sterile ear parent of the same pedigree either by blending in the field at harvest or by size at processing time. The ratio of male sterile ear parent seed to normal ear parent seed shall not exceed 2:1.

b. The pollen parent must involve a certified pollen restoring line or lines so that not less than one-third of the plants grown from hybrid corn seed produce pollen which appears to be normal in quantity and viability.

(2) Detasseling or Pollen Control:

The following requirements apply only when 5% or more of the seed parent plants have receptive silks.

a. An isolation will not be accepted for certification if more than 1.0 percent of the seed parent plants have shed pollen on any one inspection or if the total for three inspections on different dates exceeds 2.0 percent.

b. When more than one combination is being grown in the same isolation and the seed parent or one of them is shedding pollen in excess of 1.0 percent, all ear parents having 5 percent or more apparently receptive silks at the time will be disqualified unless adequately isolated from the shedding seed parent.

c. Sucker tassels, portions of tassels or tassels on main plants will be counted when 2 inches or more of the central stem, the side branches or a combination of the two have the anthers extended from the glumes and are shedding pollen.

d. The detasseling (cutting or pulling) of cytoplasmic male-sterile seed parent is permitted and the crop will be certified if it meets other certification standards.

(3) Other Varieties and Off-Type Plants

a. A field in which more than 0.1 percent definitely off-type plants in the pollen parent have shed pollen will not be certified.

b. At the time of the last inspection the seed parent shall not contain in excess of 0.1 percent definitely off-type plants.

c. Open-pollinated varieties

There shall not be more than 0.5 percent detectable admixture with plants of other varieties.

(4) Determining final percent hybridization and genetic purity by post control testing. Final certification of seed lots of seed as determined by the

certifying agency may be contingent upon determination of percent hybridization using the following methods:

- a. Biochemical methods which determine the percent hybridization by identifying selfs within the seed lot by grade size:
- b. Field growouts of seed from production fields or isolation by grade size.

3. Seed Standards for Commercial Hybrids

- (A) Other distinguished hybrids within a hybrid shall be limited to a maximum of 0.2%.
- (B) Each producer of commercial hybrids who uses male sterile ear parent shall:
 - (1) Either mix seed of the normal male fertile ear parent with the seed of the male sterile ear parent of the same pedigree by blending in the field at harvest time, or by blending at the time of processing so that not less than one- third of the plants grown from the hybrid corn seed produced pollen which appears to be normal in quantity and viability.
 - (2) Winter test all pollen restoring male parent hybrids for proof of their restoring ability. Winter testing shall be done under the supervision of the certifying agency.

4. Samples and Sampling of Commercial Hybrid Seed

A representative sample of at least three pounds shall be taken from each upgraded lot for laboratory analysis. A representative sample of at least one pound shall be taken from each grade in graded lot.

CERTIFICATION STANDARDS FOR SOYBEANS

1. Field Standards

- (A) The unit of certification is a field or a portion of a field. Any area occupied by one crop and is undivided by fences, roadways and ditches shall be considered a field.
- (B) A soybean field shall not be certified unless:
 - (1) The preceding soybean crop planted was a certified seed of the same variety, the soybeans were of contrasting pubescence or hilum color, the previous soybeans had a different flower color and leaf shape.
 - (2) Separated from any other variety or uncertified seed of the same variety by a distance adequate to prevent mechanical mixture.
 - (3) The ratio between the soybean plants and any previous soybeans or other varieties or off-types does not exceed the maximum permitted.

Maximum Permitted In Each Class

	Foundation	Registered	Certified
Other varieties or off-types	1/1000 (0.1%)	1/500 (0.2%)	1/200 (0.5%)

2. Varietal Blends

- (A) All soybean varietal blends shall be subject to the varietal blend specifications as set forth in the Ohio Certification Standards and Procedures Manual.
- (B) A soybean varietal blend shall have been tested for a minimum of two years in its area of adaptation with a minimum of three replications per test. The performance tests shall include appropriate check varieties which are used extensively in the area of adaptation of the blend. The data shall be available to the Ohio Seed Improvement Association.
- (C) If seed of all the varieties (components) of a certified blend are not visibly distinguishable from each other, then OSIA reserves the right to have a representative present at the place of blending during the blending operations and shall draw a sample of the final blend.

3. Seed Samples

Each producer shall supply a three-pound sample representing each lot of his cleaned seed which is eligible for certification to the certifying agency for testing.

4. Seed Standards

The certifying agency shall certify no lot of soybeans which contains off-types or other varieties in excess of the stated maximums:

	Maximum Permitted Other Varieties Or Off-Types In Each Class (% of seed)		
	Foundation (0.1%)	Registered (0.2%)	Certified (0.5%)
Other varieties or off-types			

CERTIFICATION STANDARDS FOR TIMOTHY & BROMEGRASS

1. Eligibility

Modified to apply specifically to timothy and bromegrass as follows:

- (A) Breeder seed shall produce only one generation of Foundation seed
- (B) Foundation seed shall produce only one generation of Registered seed
- (C) Registered seed shall produce only one generation of Certified seed
- (D) Certified seed shall not be eligible to produce Certified seed.

2. Field Standards

- (A) The unit of certification is a field.
- (B) The certifying agency shall certify no field or grass for the production of foundation seed on which the same species has been grown or seeded within the last five years, or for the production of registered or certified seed on which the same species was grown or seeded in the previous crop year unless the previous crop was of the same variety and of a certified class equal or superior to that of the crop seeded.
- (C) Each field shall meet the following isolation standards when any other strain or strains of the species is in bloom at the same time:

Foundation	Minimum Isolation* -- Feet		Border to be Removed**-- Feet
	Registered	Certified	
900	300	165	0
600	225	100	9
450	150	75	15

*When different classes of seed of the same variety are being grown on the same or adjacent farms, the isolation requirements may be reduced to **twenty-five percent** of that shown in the above table.

** Border removal applies to fields of 5 acres or more only.

- (D) Each applicant for certification of grass shall dispose of all seed from a rejected field or from the rejected portion(s) of a field in such a manner that it cannot be used as certified seed.
- (E) Any field of grass is ineligible for certification if the field inspector reports the presence of other varieties in excess of the stated maximum:

	MAXIMUM PLANTS PERMITTED - RATIO		
	FOUNDATION	REGISTERED	CERTIFIED
Other varieties	1:1,000 (0.1%)	1:100 (1.0%)	1:50 (2.0%)

3. Seed Samples

A representative sample (2 lb. of timothy -- 1 lb. of bromegrass) of each lot of seed eligible for certification must be supplied the agency for testing.

4. Seed Standards

The certifying agency shall certify no lot of seed which contains off-types or other varieties in excess of the following maximums:

	Maximum Permitted in Each Class					
	Timothy			Bromegrass		
	F	R	C	F	R	C
Other varieties	0.1%	1.0%	2.0%	0.1%	1.0%	2.0%

**CERTIFICATION STANDARDS FOR
BIRDSFOOT TREFOIL, RED CLOVER,
SWEET CLOVER, & CROWN VETCH**

1. Definitions

As set forth in the Ohio Certification Standards and Procedures Manual;

- (A) Northern region of adaptation means the states and parts of states located between the Canadian boundary and the 40th parallel except in the extreme west where the southern boundary is the California-Oregon state line.
- (B) Central region of adaptation means the states or parts of states between the California-Oregon state line and the 40th parallel in California and south of the 40th parallel and the southern boundary of Nevada, Utah, and Colorado, the 36th parallel to Oklahoma and Texas and the southern boundary of Missouri, Kentucky, and Virginia.
- (C) Southern region of adaptation means all states and parts of states below the southern boundary of the Central region.

2. Field Standards

- (A) The unit of certification is a field.
- (B) The certifying agency shall certify no legume field:
 - (1) In which a crop of the same kind has been grown or planted for five, three, and two years prior to stand establishment for producing the foundation, registered, and certified seed classes respectively.
 - (2) In which volunteer plants of that crop were observed in the year immediately prior to seeding.
 - (3) On which manure or other contaminating amendments are applied during the established and productive life of the stand.
 - (4) Which does not meet the minimum isolation distances in the table below:

CLASS	Fields of 5 acres or Less	Fields of Over 5 Acres
	Isolation in feet*	
Birdsfoot trefoil, red clover, crownvetch		
FOUNDATION	1320'	1320'
REGISTERED	660'	660'
CERTIFIED	330'	165'
Sweet clover		

FOUNDATION	900'	600'
REGISTERED	450'	300'
CERTIFIED	165'	165'

*Isolation distance between classes of the same variety of that crop may be reduced to twenty-five percent of that shown.

(5) A stand of red clover has produced more than two seed crops.

(6) Which has other varieties in excess of the maximum indicated below:

	Maximum Plants Permitted - Ratio		
	Foundation	Registered	Certified
Other varieties	1:1,000 (.10%)	1:400 (.25%)	1:100 (1.0%)

3. Seed Samples

Each producer shall supply a representative sample of each lot of seed which is eligible for certification to the certifying agency for analysis.

4. Seed Standards

The certifying agency shall certify no lot of seed which contains off-type or other varieties in excess of the following maximums:

	MAXIMUM PERMITTED IN EACH CLASS		
	Foundation	Registered	Certified
Other varieties or off-types	1/1000 (0.1%)	1/500 (0.2%)	1/200 (0.5%)

CERTIFICATION STANDARDS FOR NAVY BEANS

1. Eligibility

Modified to apply specifically to navy beans as follows:

- (A) Breeder seed shall be free of bacterial blight free areas.
- (B) Foundation seed shall be produced only in bacterial blight free areas.
- (C) Foundation seed shall produce only one generation of Certified seed.

2. Field Standards

- (A) The unit of certification is a field of navy beans:
- (1) In which navy beans were grown the previous crop unless the proceeding navy bean crop was planted with seed of the same variety and of a Certified class equal or superior to that of the crop seeded.
 - (2) Planted in rows less than fourteen inches apart.
 - (3) Which is not separated from each other field of the same crop or a crop of the same season by a distance sufficient to prevent mechanical mixture.
 - (4) In which other varieties or off-types, or diseases, exceed the maximum below:

	Maximum plants Permitted In Each Class	
	Foundation	Certified
Other varieties or off-types	1/3000 (0.3%)	1/1000 (0.10%)
Bacterial blight	None	None
Anthraco nose	None	1/5000 (0.02%)

3. Seed Samples

Each producer shall supply an eight-pound representative sample of each lot of his cleaned seed which is eligible for certification to the certifying agency for testing.

4. Seed Standards

- (A) The certifying agency shall certify no lot of navy beans which contains off-types or other varieties in excess of these maximums:

	Maximum Permitted in Each Class (% of Seed)	
	Foundation	Certified
Other varieties or off-types	(0.03%)	(0.10%)

- (B) All navy bean seed shall be free of bacterial blight.

CERTIFICATION STANDARDS FOR FORESTRY REPRODUCTIVE MATERIAL

1. Eligibility

Forest trees include all species normally used in forestry, including specialized products or uses such as Christmas trees, shelterbelts, etc.

2. Designation of Classes of Seed

- (A) ACertified Seed shall be seed from trees of proven genetic superiority, as defined by the certifying agency, produced so as to assure genetic identity. (Seeds from interspecific hybrids of forest trees may be accepted for certification.)
- (B) ASelected Seed is a class of tree seed which shall be progeny of rigidly selected trees or stands of untested parentage that have promise but not proof of genetic superiority, and further for which geographic source and elevation shall be stated on the certification label.
- (C) ASource -Identified Seed is a class of tree seed which shall be seed from: (1) Natural stands with known geographic location, as specified in the standards of the various certifying agencies.
- (D) For all classes of forest tree seed, the exact geographic source of the parent trees and the stand history must be known. Location of the source of certified seed and selected seed shall be designated by section or comparable land survey unit. Location of source identified seed shall be defined by means of administrative and geographic boundaries and, where applicable, by altitudinal and other appropriate boundaries judged to be significant by the certifying agencies.
- (E) In all cases where seed or other propagating materials are produced from planted or otherwise artificially established trees, the origin of the parent material must be known. Exception may be made by the certifying agency in the plantation or trees outside the natural range of a species.

3. Limitation of Generations

Limitations of generations for forest tree seed shall be in terms of a specified period of time as determined for such species by the certifying agency.

4. Production of Seed

Inspectors for forest tree shall be professional foresters or persons trained specifically for the job by such foresters. For certified and selected seed at least one field inspection shall be made

prior to pollination. At this time, compliance in regard to roguing and isolation as covered by the applicable agency standards will be checked. For all classes of seed, an inspection will be made prior to seed maturity and the size of the crop will be estimated.

5. Unit of Certification

An individual tree, clone, or stand of trees may be certified in producing certified, selected, or source-identified seed.

6. Labeling

- (A) The following tag colors shall apply:

Certified Tree Seed	Blue Label
Selected Tree Seed	Green Label
Source-Identified	Yellow Label
- (B) Labels shall be affixed to the containers and the containers sealed to the satisfaction of the certifying agency.

7. Sampling and Testing

For seed of species not covered by the rules for testing seeds of the Association of Official Seed Analysts, the analysis and testing shall be in accordance with the rules of the International Seed Testing Association or appropriate state or governmental laboratories as determined by the certifying agency.

8. Land Requirements

Elevation to the nearest five hundred feet of the original geographic source and the average height and age of the trees from which collected shall be shown on the tag for all forest tree seed. If available, site index (the capability of a given site to produce seed trees as measured by the height of the trees at a specific age) may be recorded instead of tree height and age.

9. Field Standards

- (A) General Isolation

For certified or selected seed, an adequate isolation zone shall be maintained free of all type plants and other species which might cross-pollinate producing trees. The isolation distance and specifications for off-type plants shall be set for each variety of species by the certifying agency. There shall be no requirements for source -identified.

- (B) Specific
 There shall be no tolerance for off-type plants.
 All clones used in seed orchards shall be tested in accordance with the requirements of the certifying agency.

10. Seed Standards

The following standards apply to seed of the southern pines:

Factor	Certified	Selected	Source-Identified
Pure Seed (Minimum)	98%	98%	98%*
Inert Matter (Maximum)	2%	2%	2%
Other Species	.01%	.01%	.05%
Germination (Minimum Apparent)	85%	85%	85%

Standards for other species and/or groups of species will be included as they become available.

*Exceptions may be made contingent on inherent characteristics of species involved.

TURF GRASS SOD CERTIFICATION STANDARDS

1. Application of Genetic Certification Standards

- (A) The genetic Certification standards, published in the Ohio Certification Standards and Procedures Handbook.
- (B) Classes of seed recognized:
- Foundation sod shall be the vegetative increase of breeder sod or seed.
 - Registered sod shall be the vegetative increase of foundation sod or seed.
 - Certified sod shall be the vegetative increase of foundation, registered, or certified sod or seed. Planting stock requirements for turf type species appear in table 1.

2. Planting Stock Standards

Minimum planting stock or component standards for Ohio Certified sod quality seed mixtures to be used for cultivated turf grass and sod production are as follows:

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Table 1.

Variety	Minimum purity	Minimum germination	Maximum other* crop seed	Maximum*** weed
Merion kentucky bluegrass	96%	80%	0.1% **	.1%
Other varieties of Kentucky bluegrass	97%	80%	0.1% **	.1%
Hard Fescue	98%	85%	0.1%	.1%
Red Fescue	98%	90%	0.1%	.1%
Chewings fescue	98%	90%	0.1%	.1%
Tall fescue	98.5%	80%	0.1% ****	.1%
Bentgrass	98%	80%	0.1%	.1%
Perennial ryegrass	96%	80%	0.1%	.1%

*must be free of Orchardgrass, ryegrass (See exception for tall fescue), Timothy, Bentgrass, Big Bluegrass, Poa Trivialis, Smooth Bromegrass, Reed Canarygrass, Bermudagrass, and Clover, and OSIA undesirable grass seed species (see attached list).

Canada Bluegrass in Kentucky Bluegrass varieties, maximum .02%

Red Fescue and Chewings Fescue must be free of canada bluegrass.

**other Kentucky Bluegrass - maximum 2%.

***must be free of Dock, Chickweed, Crabgrass, Plantain, Black Medic, Annual Bluegrass, Velvetgrass and Ohio secondary noxious and prohibited noxious weed seeds.

****Ryegrass seed in tall fescue seed shall not exceed 30 per pound based on analysis of 50 gram sample.

A sod seed analysis based on a 10 gram sample for Kentucky Bluegrass; 30 grams Fine Fescue; 20 grams Hard Fescue; 50 grams for Tall Fescue and Perennial Ryegrass; and a 2 1/2 gram Bentgrass sample for noxious, all weed and all crop seed; a 10 gram poa annua check shall be the basis of determining seed standards.

Analysis shall be discontinued when results of the test exceed the maximum limits set forth in table 1.

In an emergency, and at the discretion of OSIA, seed lots failing to meet the standards in Table 1 for other than genetic purity may be used for Certified production only when OSIA determines in writing that there exists a serious shortage of seed.

3. Supervised mixing procedures for interagency Certified Sod Quality Turf Grass Mixtures

- (A) The OSIA member will accumulate component lots of interagency Certified turf grass seed that carry a recognized sod quality or Certified tag. If a single Certified component does not carry a Maryland or New Jersey sod quality tag, then the member may request an official OSIA sample enough in advance so that an OSIA official test can be made to ascertain component eligibility. Component lots must be pre-sampled, (unless they are Maryland or New Jersey lots), tested, and qualify for Asod quality class seed by OSIA before mixing and being planted for certified sod production. Only Asod quality (As defined herein) class seed may be used for planting Ohio certified sod. Maryland and New Jersey component sod quality lots will be accepted without testing, provided the necessary lab report documentation is submitted to OSIA prior to mixing.
- (B) The member will be allowed to pre-issue new Ohio certified sod quality or general standard Certified tags before the mixing appointment. If any component of the mix is not certified, then the component lot is not eligible for this program. The tag pre-issue form should include information regarding the component variety name, state of origin, and lot number. One certified tag and one sod quality tag (if available) from each component kind and lot shall be sent to OSIA at the time of submitting the finished mix sample.
- (C) An OSIA inspector will be in continuous supervision of the mixing procedure and will provide a signed report of each mixing session. The member shall notify their designated OSIA inspector five business days prior to mixing, to schedule an appointment. If the inspector cannot supervise the mixing at the designated time, the inspector will then notify the OSIA office to make other arrangements.
- (D) Seed shall be handled at all times to maintain satisfactory genetic purity and identity. The OSIA inspector at the time of mixing will inspect the blending device and area surrounding the blender for contaminants. If contaminants are found, the member will reclean the problem area and the inspector will reinspect.
- (E) The eligible components shall be mixed in the presence of the OSIA inspector following the initial equipment inspection. The mixing percentages and total pounds of mixture for each lot shall be given to the OSIA inspector for official file records. The components shall be handled in such a manner to prevent contamination and maintain varietal identity. The interagency sod quality tags and certified tags from the component lots shall be destroyed in the presence of the OSIA inspector. New mixture of certified seed tags will be sewn on the new bags.

- (F) The inspector will draw official samples of all components prior to mixing as well as a 1 lb. sample of the final mixed lots. Component samples will be sent to OSIA for an official sod quality complete test (germ, purity, all Ohio noxious, undesirable species, etc.). A sample of the final mix will be kept by OSIA for file purposes only.
- (G) Seed companies are advised that Ohio Certified sod quality component or mixture lots will not be eligible for certified sod production planting stock in several Northeastern regional states.

4. Land Requirements

- (A) A field to be eligible for the production of foundation or registered sod must have been inspected two (2) times and found free of all other perennial grass species and varieties for one year preceding the time of planting.
- (B) A field to be eligible for the production of certified sod must have been inspected prior to planting and found free of all other perennial grasses.
- (C) A field to be eligible for the production of Foundation, Registered, or Certified sod may be thoroughly treated with a recommended soil fumigant and left undisturbed for three weeks, at which time an official inspection shall be made to determine if the land is free of perennial grasses. Soil conditions should be favorable for seed germination and active plant growth during this period.
- (D) No animal manures or other material potentially containing seeds shall be applied on sod to be entered for certification.

5. Field Standards

Isolation

A field to be eligible for the certification of sod must be isolated from any other perennial grass by a barrier that will prevent encroachment or mechanical mixing during harvesting.

6. Sod Standards

The sod must be of uniform density, color, and texture. OSIA may not certify turf grass unless it is uniform in density, color, and texture and free of excessive amounts of thatch, insects, diseases, nematodes, and any other abnormal condition. Ohio Certified sod producers may be required by a receiving state, to obtain a phytosanitary certificate on sod destined for sale outside of Ohio. Members should contact the Ohio Department of Agriculture, Division of Plant Industries, for this inspection service.

Table 2.

	Maximum permitted in 1000 square feet		
	Foundation	Registered	Certified
Noxious weeds	none	none	none
*objectionable weeds	-	-	-
Other varieties	none	1	3

*kind and amount to be designated by the Certifying agency.

"SOD QUALITY PROHIBITIVE SPECIES LIST"

*Appendix Table

1. OSIA Undesirable Grass Seed Species

Seed of the following plants shall be regarded as prohibited and undesirable when present in Bentgrass, Kentucky bluegrass, Chewings fescue, hard fescue, red fescue, varieties of named turf-type tall fescue, varieties of perennial ryegrass, or a mixture containing any of these grasses:

- (a) Bentgrass** (Creeping, Colonial , Velvet) - *Agrostis* spp.;
- (b) Bermudagrass, Giant Bermudagrass - *Cynodon* spp.;
- (c) Annual bluegrass - *Poa annua*;
- (d) Rough bluegrass** - *Poa trivialis*;
- (e) Meadow fescue** - *Festuca pratensis*;
- (f) Tall fescue** - *Festuca arundinacea*;
- (g) Orchardgrass - *Dactylis glomerata*;
- (h) Redtop** - *Agrostis gigantea*;
- (i) Timothy - *Phleum pratense*;
- (j) Velvetgrass - *Holcus lanatus*;

Undersirable grass seed species are not allowed (none) to be present in either Ohio Sod Quality or General Standard Certified mixtures

**May be included as a labeled component of a mixture when each is present in excess of five percent, by weight, of the mixture.

2. OSIA Supplemental Lawn and Turf Noxious Weed Seed List

- (A) Prohibited noxious weed seed are:
 - (1) Ballonvine - *Cardiospermum halicacabum*;
 - (2) Canada thistle - *Cirsium arvense* L.;

- (3) Plumeless thistle, which includes musk thistle and curled thistle - *Carduus* spp.;
- (4) Quackgrass - *Agropyron repens* L.;
- (5) Sicklepod - *Cassia tora*;
- (6) Sorghum species, which include Johnsongrass (*Sorghum halepense* L.) and hybrids that contain Johnsongrass as a parent, and any other kind of grass that produces seed which cannot be distinguished readily from Johnsongrass seed.

WOODY PLANTS AND FORBS CERTIFICATION STANDARDS

1. Application of Genetic Certification Standards for Woody Plants and Forbs

- (A) Genetic Standards are as follows:
 - (1) Limitation of Generations
Both sexual (seed) and asexual (cuttings, rhizomes, etc.) means of reproduction and establishment are addressed by these standards, with one asexual generation being equivalent to one sexual generation (i.e., Breeder, Foundation, Registered and Certified).
 - (2) Length of Stand Requirements
The life of the stand shall be unlimited as long as 75% of the plants present in the stand are those that were planted originally. Exceptions may be otherwise specified by the originator of the variety of his designee.

2. Land Requirements

A field, to be eligible for the production of certified classes of seed, must not have grown, been seeded to, or had volunteer plants producing seed of the same species (except for plants or seed of the same variety of equal or higher classification) during the previous four (4) years for Foundation, three (3) for Registered, or two (2) years for Certified.

3. Field Standards

- (A) General
 - (1) Field Inspection
Seed field inspection will be made in the year of establishment, and at least once each year that seed is to be harvested. This inspection should be made at the stage of plant development when off-types or other varieties, disease status, weed contamination, etc., can be readily detected.

- (2) Isolation
For seed production, minimum distance from a variety, fields of the same variety that do not meet the varietal purity requirements for certification, or wild hybridizing populations, are as follows:

	Minimum of Isolation - Feet	
	Fields of 2 acres or less	Field of more than 2 Acres
Foundation & Registered	400	200
Certified	200	100

- (3) For seed production of different classes of the same variety or for asexual reproduction, only a distinct separation (fence line, roadway, etc.) is necessary. Volunteer plants may be a cause for rejection or reclassification of a seed field (see Section I.B.2).

(B) Specific

Factor	Ratio in field		
	Foundation	Registered	Certified
*Other Varieties & Off Type	1/1000	1/500	1/250
Other Kinds (inseparable other species)	1/2000	1/1000	1/500
**Noxious Weeds	None	None	None
***Restricted or Objectionable Weeds	Varies with species		

* Some species may have a phenotypically variable population; this should be accounted for in the breeder's description such that true off-types will not exceed the stated ratio. Exceptions may be otherwise specified by the breeder or their designee.

**Must be under cultural or chemical control such that mature noxious weed seed will not be harvested with crop seed.

***Restricted weeds and/or objectionable weeds that pose a particular problem for a given species must be limited in the field to the extent that the maximum allowed in the seed standards may be reasonably met.

4. Seed Standards

(A) General

- (1) Sampling and testing seeds: For seed of species not covered by the Rules For Testing Seeds of the Association of Official Seed Analysts, the analysis

and testing shall be in accordance with the rules of the International Seed Testing Association or appropriate State or Governmental laboratories as determined by the certifying agency.

- (2) A representative sample of vegetatively propagated materials must be inspected to insure varietal purity. Quality factors may be established by individual certifying agencies.
- (B) Specific
 - (1) All propagating material:

Factor	Maximum permitted in each class		
	Foundation	Registered	Certified
Other Varieties	0.25%	.50%	.75%
Other Kinds	0.15%	.25%	.50%
Total Other Crops	0.40%	.75%	1.25%
Noxious Weeds	None	None	None

PRE-VARIETY GERMPLASM CERTIFICATION STANDARDS

1. Application of Genetic Certification Standards for Pre-Variety Germplasms

- (A) Genetic Standards are as follows:
 - (1) Eligibility Requirements for Varieties
 - (a) Eligible species include indigenous or non-indigenous trees, shrubs (including vines), or herbaceous plants (forbs and grasses).
 - (b) These standards address seed, seedlings, or other propagating materials of species, selections, clones, intraspecific hybrids, etc. (collectively referred to as germplasm types) which have not been released as a variety. Germplasm types are recognized as follows:
 - (2) Tested Class*

Tested propagating materials shall be the progeny of plants whose parentage has been tested and has proven genetic superiority or possesses distinctive traits for which the heritability is stable, as defined by the certifying agency, but for which a variety has not been named or released. This seed must be produced so as to assure genetic purity and identity from either:

 - (a) rigidly controlled and isolated natural stands or individual plants, or

- (b) seed fields or orchards.
- (3) Selected Class
 - Selected propagating materials shall be the progeny of phenotypically selected plants of untested parentage that have promise but not proof of genetic superiority or distinctive traits, produced so as to ensure genetic purity and identity from either;
 - (a) Natural stands or seed production areas, or
 - (b) Seed fields or orchards. This definition is equivalent to the OECD "Untested Seed Orchard" category and may be labeled as such by special tag if required (see item 6.B).
 - (c) Methods used and monitoring of selection and testing of parent material to qualify for different germplasm types shall be determined by the Certification agency for each species or group of species
 - (4) Source Identified Class
 - Source Identified propagating materials are seed, seedlings, or other propagating materials collected from natural stands, seed production areas, seed fields, or orchards where no selection or testing of the parent population has been made.

2. Designation of Classes of Seed

Classes (Breeder, Foundation, Registered, Certified) designate and define generations of a named and released variety. It is not permissible to use the same terms (Foundation, Registered, etc.) to designate generations or Tested or Selected germplasm types. Suggested terms are Generation I as equivalent to Breeder and Generation 4 as equivalent to Certified class.

3. Limitations of Generations

- (A) Limitation of generations of Tested and Selected germplasm types may be specified for each species by the Certifying agency.
- (B) No limitation of generations is defined for Source Identified Germplasm type.
- (C) Both sexual (seed) and asexual (cuttings, rhizomes, grafting, etc.) means of reproduction and establishment are addressed by the limitation of generations, with one asexual generation being equivalent to one sexual generation.

4. Unit of Certification

An individual plant, clone, or stand of plants (or field or orchard) may be certified

in producing Tested, Selected, or Source-Identified seed. Seed production zones and/or breeding zones may be defined as a unit of certification for Selected and Source Identified seed.

5. Production of Seed

- (A) For Tested and Selected seed at least one field inspection shall be made prior to pollination. At this time, compliance with regard to roguing and isolation as covered by the applicable agency standards will be checked. An inspection will also be made just prior to seed maturity or during harvest to ensure compliance with standards and estimate potential seed yields.
- (B) For Source Identified seed, an inspection made prior to seed maturity and/or collection is required.
- (C) For all germplasm types, compliance with regard to correct identification of species, location of natural stand or field or orchard, and seed yield must be verified by whatever means is deemed efficient and enforceable by the certification agency.
- (D) Producers of seedling or otherwise propagated nursery or container stock shall be supervised sufficiently so that the certification agency knows that the stock was produced from the germplasm type claimed.

6. Labeling

- (A) The following tag or label colors shall apply:
 Tested Class -- Blue
 Selected Class -- Green (Note exception in 6b. below)
 Source Identified Class -- Yellow
- (B) Format of face side of label: The respective seed germplasm type (TESTED, SELECTED, OR SOURCE IDENTIFIED) must be printed on the top line across the tag or label.
 The generation of the seed may be indicated in the center of the tag along with such information as species, selection number, lot number, location, elevation, site index, seed zone and/or breeding zone, etc.
 Exception: To satisfy requirements of the OECD Scheme, seed from Selected Class seed orchards may be tagged with a pink tag having UNTESTED SEED ORCHARD, printed on the top line across the tag or label.

7. Sampling and Testing

For seed of species not covered by the rules for testing seeds of the Association of

Official Seed Analysts, the analyses and testing shall be in accordance with the rules of the International Seed Testing Association or appropriate state or federal laboratories as determined by the certifying agency.

8. Land Requirements

- (A) For the tested germ plasm type, the exact geographic source of the parent plants the stand history must be known. Location (designation by section or comparable land survey unit) and elevation (nearest 500 ft. of the site of seed production must be shown on the tag.
- (B) For the Selected germplasm type, seed zones and/or breeding zones may be defined to indicate location or naturally produced seed for tag information. artificially established fields or orchards may be listed either by specific site or by zonal definition.
- (C) Location where Source-Identified seed was collected shall be defined by means of administrative, geographic, latitudinal, or other appropriate boundaries or descriptions judged to be significant by the certifying agency. State, county, and elevation (nearest 500 feet) is the minimum required to be shown on the tag.
- (D) In all cases where seed or other propagating materials are produced in fields or orchards, the origin of the parent material must be known. Exception may be made by the certifying agency regarding plantings outside the natural range of a species. The location on the tag shall be the location of the field or orchard, not the location of origin of the parent material.

9. Field Standards

- (A) Isolation
 - (1) For Tested or Selected germplasm types, an adequate isolation zone shall be maintained free of off-type plants and other cross pollinating species. The isolation distance shall be set for each species by the certifying agency.
 - (2) There shall be no isolation requirements for Source-Identified seed.
- (B) Specific
 - (1) For Tested and Selected Germplasm types, off-type plants (and plants of inseparable other species or hybridizing species) are to be defined and appropriate tolerance set by the certifying agency.
 - (2) Design and methods for establishing seed fields and orchards and the selecting and testing of plant material shall be in accordance with the requirements of the certifying agency for each species or group of species.

10. Seed Standards

Seed standards are optional and may be set by the certifying agency. However, state, and federal laws regarding analysis labeling must be observed.

- (C) Specific
 (1) All propagating material:

Factor	Foundation	Registered	Certified
Other Varieties	0.25%	.50%	.75%
Other Kinds	0.15%	.25%	.50%
Total Other Crops	0.40	.75%	1.25%
Noxious Weeds	None	None	None

GRASS SEED CERTIFICATION STANDARDS

1. Application of Genetic Certification Standards for Big Bluestem, Coastal Panicgrass, Deertongue, Switchgrass and All Other Grass Species.

- (A) The Genetic Standards are modified as follows:
 Classes of Seed recognized in Seed Certification shall be Breeder, Foundation Registered and Certified
- (B) All classes of certified seed may be produced from vegetatively propagated planting stock in accordance with the procedure specified by the originator, but in such cases the standards for vegetatively propagated grasses shall apply.

2 Land Requirements

- (A) The production of foundation seed shall be on land that has not grown or been seeded to the same species during the previous five crop years.
- (B) The production of the registered or certified classes shall be on land that has not grown or been seeded to the same species during the previous crop year, except a certified class of the same variety equal or superior to that of the crop seeded.
- (C) Application to establish pedigree must be made within one year of seeding.
 The crop will remain under supervision of the certifying agency as long as the field is eligible for certification.

3. Field Standards

- (A) General
 Isolation

1. A strip at least 5 feet in width and which is mowed, uncropped, or planted to some crop other than the kind in question shall constitute a field boundary.
2. The following isolation requirements shall be met when any other strain or strains of the species is in bloom at the same time except that the minimum isolation for all seed classes of tetraploids shall be 15 feet from diploids of the same species.

Type of Reproduction	Border to be Re- moved* - Feet	**Minimum Isolation B Feet		
		Foundation	Registered	Certified
Cross-pollinated	0	900	300	165
	9	600	225	100
	15	450	150	75
Strains at least 80% Apomictic & highly Self-fertile species***	0	60	30	15
	9	30	15	15

*Border removal applies only to fields of 5 acres or more. Where a border is to be removed such removal shall not occur until pollination of the crop to be certified is completed.

**When different classes of seed of the same variety are being grown on the same or adjacent fields, the isolation requirements may be reduced to 25% of that shown in the above table.

*** Varieties within species with both cross-pollinated and apomictic type of reproduction will be considered highly apomictic for purposes of minimum isolation unless otherwise specified for that variety.

B. Specific

Maximum

Maximum Permitted Ratio of Plants

Foundation

Registered

Certified

Other Varieties	1:1000	1:100	1:50
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4. Seed Standards

A. General

Factor	Maximum permitted in each class*		
	Foundation	Registered	Certified
Prohibited weeds (maximum) ¹	None	None	None
Total other crop seed (maximum)	0.20% ²	1.00%	2.00%
Other varieties	0.10%	1.00%	2.00%
Other kinds (maximum)	0.10%	0.10%	0.25%
In grass for forage use (maximum)	0.10%	0.10%	0.50
Common and/or other Kentucky Bluegrass in the variety Merion	- ⁵	- ⁵	3.00%

*Mechanical standards are optional

¹Prohibited weeds in non-chaffy grasses: Canada thistle (*Cirsium arvense*) dodder (*Cuscuta* spp.), horsenettle (*Solanum carolinense*), horsenettle (*Solanum eleagnifolium*), Johnson grass (*Sorghum halepense*), leafy spurge (*Euphorbia esula*), perennial sow thistle (*Sonchus arvensis*), quackgrass (*Apropyron repens*), Russian knapweed (*Centaurea picris*), white top (*Cardaria draba*), white top (*Cardaria pubescens*), wild garlic (*Allium vineale*), wild morning-glory (*Convolvulus arvensis*). Since the weed problem may be different in each section of the United States and Canada, the certifying agency shall adopt appropriate weed seed standards specifying tolerance the objectionable weeds.

²For Indian Ricegrass 0.5%³All varieties of perennial ryegrass seed are allowed 3.0 percent, as determined by the fluorescence test. Seed of Critana thickspike wheatgrass wheatgrass (*Apropyron dasystachum*) may contain up to 30% slender wheatgrass (*Agropyron trachycaulum*) type

⁴For Indian Ricegrass 0.25%

⁵To be left to the discretion of the certifying agency until the characteristics of the variety Merion are defined.

FLATPEA CERTIFICATION STANDARDS

1. Application of Genetic Certification Standards to Flatpea.

2. Land Requirements

General requirements for which no prior Flatpea crop maybe planted are: four years for Foundation; three years for Registered and one year for Certified classes. The land must be free of volunteer plants of the crop kind during the year immediately prior to establishment and no manure or other contaminating material shall be applied the year previous to seeding or during the establishment and productive life of the stand.
 At least 2 years must elapse between destruction of indistinguishable varieties of dissimilar adaptation and establishment of the stand for the production of the Certified class of seed.

3. Field Standards

(A) General

1. Isolation requirements for fields 5 acres (2 ha) or larger in area are as follows: for Foundation 600 feet.; Registered 300 feet; and Certified 165 feet.

2. Specific isolation requirements are as follows;

For fields less than 5 acres (2 ha) the distances are 900 feet (274.32m) and 450 feet (137.16m) for the Foundation and Registered classes, respectively.

Distance between fields of certified classes of the same variety may be reduced to 10 feet (3.05m) regardless of the class or size of the fields.

Isolation distance for Certified seed production shall be at least 500 feet (152.07m) from varieties of dissimilar adaptation.

B. Specific

Factor	Maximum Permitted B Ratio of Plants		
	Foundation	Registered	Certified

Other Varieties	1:1000	1:400	1:100
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4. Seed Standards

Factor	Standards for classes*		
	Foundation	Registered	Certified
Pure Seed (minimum)	99.9%	99.75%	99.00%
Other Varieties Crop (maximum)	.10%	.25%	1.0%
Germination (minimum)			
Flat Pea	N.S.	N.S.	N.S.

*Mechanical Standards are optional
N.S. B No Standard

CANOLA, CRAMBE, MUSTARD OR RAPESEED STANDARDS

The General Seed Certification Standards, as adopted by Ohio Seed Improvement Association (OSIA) together with the following specific standards constitute standards for certification of canola, crambe, mustard or rapeseed, industrial and edible types, respectfully.

I. Land Requirements

- A. It is recommended that not more than one variety or crop of canola, mustard or rapeseed be produced by a certified producer in any given year. A crop of canola, crambe, mustard or rapeseed must not have been grown or planted on the land for five, four, and three years prior to stand establishment for producing the Foundation, Registered and Certified classes, respectively.
- B. Do not apply manure or other contaminating material to the land in preparation for planting of all certified classes or during the productive life of the stand.
- C. Reseeding of a field, due to failure or partial failure of the first seeding, may be done with permission of the certifying agency.
- D. All roadways, ditch banks and other adjacent to a certified field must be free of volunteer canola, crambe, mustard and rapeseed (wild or tame).

II. Isolation

Certified fields must maintain the following minimum isolation distances from fields any

other variety or fields of the same variety that do not meet the varietal purity requirements for certification as given in the following table.

Class	Fields of Cross-Pollinated Varieties	Fields of Self Pollinated Varieties	Certified Fields of Same Varieties
Foundation	1,320 feet	660 feet	15 feet
Registered	1,320 feet	660 feet	15 feet
Certified	660 feet	330 feet	15 feet

III. Field standards – General

- A. A portion of a field may be certified if the area to be certified is clearly defined. Portions of a field not meeting isolation requirements for certification must not be harvested as any class of certified seed.
- B. Volunteer plants may be cause for field rejection or down grading to a lower certification class.

IV. Field Standards – Specific

Ratio of Plants – Maximum Permitted

Factor	End	Reg	Cert
Other Varieties*	1:2000	1:1000	1:500

*Other varieties will be considered to include off-type plants and plants that can be differentiated from the variety being inspected.

V. Field Inspection

- A. The field inspection will preferably be made when the crop is in the early flowering stage or at maturity.
- B. It is the grower's responsibility to ensure that crops have been inspected prior to harvest. Crops cut, swathed or harvested prior to being field inspected are not eligible for certification.

VI. Preparation of Seed for Final Certification

- A. Cleaning
 - 1. Clean all seed at approved conditioner plant authorized by OSIA. A list of authorized cleaning plants is available through the OSIA office.

2. Seed delivered to the cleaning plant by grower must be identified by variety and Certification number. A copy of the grower's Application for Certification or field inspection form will suffice.

VII. Recommended or Optional Seed Standards

Factor		Fnd%	Reg%	Cert%
Pure Seed	min.	99.00	99.00	99.0
Inert Matter	max.	1.00	1.00	1.00
Other Crop Seed	max.	9/lb	9/lb	18/lb
Total Weed Seed	max.	90/lb	90/lb	180/lb
Noxious Weed Seed ^{1/}		None	None	None
Objectionable Weeds ^{2/}	max.	9/lb	9/lb	18/lb
Diseases:				
Sclerotia (<i>Sclerotinia sclerotiorum</i>)		1/lb	1/lb	1/lb
<i>Phoma lingam</i>		.01	.01	.01
Seed Analysis ^{3/}		--	--	--
Total Germination	min.	85.00	85.00	85.00

^{1/} None means none found during normal inspection procedures. None is not guarantee that the lot is free of noxious weed seed.

^{2/} Objectionable weed seeds are defined as: Restricted plus, *Brassica nigra*, *Sinapis arvensis*, *Brassica juncea*, and *Raphanus raphanistrum*

^{3/} Eruric acid and glucosinolate content must be within tolerance as described by the plant breeder for each variety.

CAMELINA STANDARDS

I. APPLICATION OF GENETIC CERTIFICATION STANDARDS

The Genetic Certification Standards are basic.

II. LAND REQUIREMENTS

Camelina shall be planted on land on which the previous crop was another kind, or was planted with a foundation or registered class of seed of the same variety.

III. FIELD STANDARDS

A. General

1. Isolation – A field producing any class of certified seed must be at least 50 feet from any other variety or fields of the same variety that do not meet the varietal purity requirement for certification. (Note: Indirect observation indicates this crop to be prevalently self-pollinated (3 to 20%).
2. Poor stands, poor vigor, lack of uniformity, excess weeds, or conditions which are apt to make inspection inaccurate or bring certified seed into disfavor can be a cause for field rejection.

B. Specific

Factor	Maximum permitted in each class		
	Foundation	Registered	Certified
Other Varieties*	1:5000	1:2000	1:1000
Other Crops	None	.05%	.10%

*Other varieties shall be considered to include plants that can be differentiated from the variety being inspected. However, other varieties shall not include variations which are characteristic of the variety being tested.

C. Field Inspection

Field inspections should preferably be done when the crop is in bloom. Fields may be refused certification due to weedy conditions (appearance), poor growth, poor stand, disease, insect damage, and any other condition preventing accurate inspection or creating doubt as to varietal identity.

Note: Prickly Lettuce, Fanweed and Shepherds Purse are among some of the troublesome, potentially inseparable weeds in this seed crop.

D. Suggested and Optional Seed Standards

Factor	Standards permitted in each class		
	Foundation	Registered	Certified
Pure Seed (min)	98%	98%	97%
Other Crop Seed (max)	.10	.20%	.30%
Inert Matter (max)	1.0%	1.0%	1.0%
Weed Seed (max)	.05%	.05%	.05%
Objectionable Weeds ¹	None ²	None	None
Germination (min)	85%	85%	85%

¹To be determined by the Certifying Agency

²“None” means none found in the sample submitted. It is not a guarantee that the seed lot inspected is free of the factor.