



**Dora**  
Department of Regulatory Agencies

**Office of Policy, Research and Regulatory Reform**

# **2008 Sunset Review: Colorado Seed Act**

October 15, 2008





**Executive Director's Office**  
D. Rico Munn  
Executive Director

Bill Ritter, Jr.  
Governor

October 15, 2008

Members of the Colorado General Assembly  
c/o the Office of Legislative Legal Services  
State Capitol Building  
Denver, Colorado 80203

Dear Members of the General Assembly:

The mission of the Department of Regulatory Agencies (DORA) is consumer protection. As a part of the Executive Director's Office within DORA, the Office of Policy, Research and Regulatory Reform seeks to fulfill its statutorily mandated responsibility to conduct sunset reviews with a focus on protecting the health, safety and welfare of all Coloradans.

DORA has completed the evaluation of the Colorado Seed Act. I am pleased to submit this written report, which will be the basis for my office's oral testimony before the 2009 legislative committee of reference. The report is submitted pursuant to section 24-34-104(8)(a), of the Colorado Revised Statutes (C.R.S.), which states in part:

The department of regulatory agencies shall conduct an analysis of the performance of each division, board or agency or each function scheduled for termination under this section...

The department of regulatory agencies shall submit a report and supporting materials to the office of legislative legal services no later than October 15 of the year preceding the date established for termination....

The report discusses the question of whether there is a need for the regulation provided under Article 27 of Title 35, C.R.S. The report also discusses the effectiveness of the Department of Agriculture and staff in carrying out the intent of the statutes and makes recommendations for statutory and administrative changes in the event this regulatory program is continued by the General Assembly.

Sincerely,

D. Rico Munn  
Executive Director





Bill Ritter, Jr.  
Governor

D. Rico Munn  
Executive Director

## **2008 Sunset Review: Colorado Seed Act**

### **Summary**

#### ***What Is Regulated?***

The Colorado Department of Agriculture (CDA) has regulatory authority over Custom Seed Conditioners, Farmer Seed Labelers, Retail Seed Dealers and Seed Labelers.

#### ***Why Is It Regulated?***

The purpose of the Colorado Seed Act (CSA) is to prevent the distribution of poor quality seed to consumers that could result in low crop yields, poor crop quality and the spread of noxious weeds.

#### ***Who Is Regulated?***

In fiscal year 06-07, there were 1,119 registered individuals:

- Custom Seed Conditioners - 22
- Farmer Seed Labelers - 45
- Retail Seed Dealers - 903
- Seed Labelers - 149

#### ***How Is It Regulated?***

The CDA regulates seeds in Colorado through a regulatory framework that includes:

- Registering Custom Seed Labelers, Farmer Seed Labelers, Retail Seed Dealers and Seed Labelers;
- Conducting inspections of seed labels;
- Sampling seed at warehouse and retail facilities; and
- Imposing discipline for violations of the CSA.

#### ***What Does It Cost?***

In fiscal year 06-07, the total expenditures to oversee this program were \$183,914, and there were 1.42 full-time equivalent employees associated with this program. The program is funded through both General Fund and cash fund appropriations.

In fiscal year 06-07, funding for the program was allocated as follows:

- General Fund - \$114,625
- Cash Fund - \$69,289

#### ***What Disciplinary Activity Is There?***

Between fiscal years 02-03 and 06-07, the CDA's disciplinary activities consisted of:

- Cease and Desist Orders – 211
- Fines - 3

#### ***Where Do I Get the Full Report?***

The full sunset review can be found on the internet at: [www.dora.state.co.us/opr/oprpublications.htm](http://www.dora.state.co.us/opr/oprpublications.htm).

## Key Recommendations

### **Continue the Colorado Seed Act for 11 years, until 2020.**

The CSA provides protection to consumers by preventing the distribution of poor quality seeds that could result in low crop yields, poor crop quality and the spread of noxious weeds. To achieve an adequate level of consumer protection, the CDA utilizes a regulatory framework that includes a registration system, inspections of seed labels, sampling of seed and imposing discipline. The absence of the aforementioned regulatory framework could result in consumers being exposed to inferior seeds in Colorado.

## Major Contacts Made During This Review

Applewood Seed  
Arkansas Valley Seed  
Colorado Department of Agriculture  
Colorado Seed Growers Association  
Colorado Seed Laboratory  
Sharp Brothers Seed Company

### **What is a Sunset Review?**

A sunset review is a periodic assessment of state boards, programs, and functions to determine whether or not they should be continued by the legislature. Sunset reviews focus on creating the least restrictive form of regulation consistent with protecting the public. In formulating recommendations, sunset reviews consider the public's right to consistent, high quality professional or occupational services and the ability of businesses to exist and thrive in a competitive market, free from unnecessary regulation.

Sunset Reviews are Prepared by:  
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## Background

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### *Introduction*

Enacted in 1976, Colorado's sunset law was the first of its kind in the United States. A sunset provision repeals all or part of a law after a specific date, unless the legislature affirmatively acts to extend it. During the sunset review process, the Department of Regulatory Agencies (DORA) conducts a thorough evaluation of such programs based upon specific statutory criteria<sup>1</sup> and solicits diverse input from a broad spectrum of stakeholders including consumers, government agencies, public advocacy groups, and professional associations.

Sunset reviews are based on the following statutory criteria:

- Whether regulation by the agency is necessary to protect the public health, safety and welfare; whether the conditions which led to the initial regulation have changed; and whether other conditions have arisen which would warrant more, less or the same degree of regulation;
- If regulation is necessary, whether the existing statutes and regulations establish the least restrictive form of regulation consistent with the public interest, considering other available regulatory mechanisms and whether agency rules enhance the public interest and are within the scope of legislative intent;
- Whether the agency operates in the public interest and whether its operation is impeded or enhanced by existing statutes, rules, procedures and practices and any other circumstances, including budgetary, resource and personnel matters;
- Whether an analysis of agency operations indicates that the agency performs its statutory duties efficiently and effectively;
- Whether the composition of the agency's board or commission adequately represents the public interest and whether the agency encourages public participation in its decisions rather than participation only by the people it regulates;
- The economic impact of regulation and, if national economic information is not available, whether the agency stimulates or restricts competition;
- Whether complaint, investigation and disciplinary procedures adequately protect the public and whether final dispositions of complaints are in the public interest or self-serving to the profession;
- Whether the scope of practice of the regulated occupation contributes to the optimum utilization of personnel and whether entry requirements encourage affirmative action;
- Whether administrative and statutory changes are necessary to improve agency operations to enhance the public interest.

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<sup>1</sup> Criteria may be found at §24-34-104, C.R.S.

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## *Types of Regulation*

Regulation, when appropriate, can serve as a bulwark of consumer protection. Regulatory programs can be designed to impact individual professionals, businesses or both.

As regulatory programs relate to individual professionals, such programs typically entail the establishment of minimum standards for initial entry and continued participation in a given profession or occupation. This serves to protect the public from incompetent practitioners. Similarly, such programs provide a vehicle for limiting or removing from practice those practitioners deemed to have harmed the public.

From a practitioner perspective, regulation can lead to increased prestige and higher income. Accordingly, regulatory programs are often championed by those who will be the subject of regulation.

On the other hand, by erecting barriers to entry into a given profession or occupation, even when justified, regulation can serve to restrict the supply of practitioners. This not only limits consumer choice, but can also lead to an increase in the cost of services.

Regulation, then, has many positive and potentially negative consequences.

There are also several levels of regulation.

### Licensure

Licensure is the most restrictive form of regulation, yet it provides the greatest level of public protection. Licensing programs typically involve the completion of a prescribed educational program (usually college level or higher) and the passage of an examination that is designed to measure a minimal level of competency. These types of programs usually entail title protection – only those individuals who are properly licensed may use a particular title(s) – and practice exclusivity – only those individuals who are properly licensed may engage in the particular practice. While these requirements can be viewed as barriers to entry, they also afford the highest level of consumer protection in that they ensure that only those who are deemed competent may practice and the public is alerted to those who may practice by the title(s) used.

### Certification

Certification programs offer a level of consumer protection similar to licensing programs, but the barriers to entry are generally lower. The required educational program may be more vocational in nature, but the required examination should still measure a minimal level of competency. Additionally, certification programs typically involve a non-governmental entity that establishes the training requirements and owns and administers the examination. State certification is made conditional upon the individual practitioner obtaining and maintaining the relevant private credential. These types of programs also usually entail title protection and practice exclusivity.

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While the aforementioned requirements can still be viewed as barriers to entry, they afford a level of consumer protection that is lower than a licensing program. They ensure that only those who are deemed competent may practice and the public is alerted to those who may practice by the title(s) used.

### Registration

Registration programs can serve to protect the public with minimal barriers to entry. A typical registration program involves an individual satisfying certain prescribed requirements – typically non-practice related items, such as insurance or the use of a disclosure form – and the state, in turn, placing that individual on the pertinent registry. These types of programs can entail title protection and practice exclusivity. Since the barriers to entry in registration programs are relatively low, registration programs are generally best suited to those professions and occupations where the risk of public harm is relatively low, but nevertheless present. In short, registration programs serve to notify the state of which individuals are engaging in the relevant practice and to notify the public of those who may practice by the title(s) used.

### Title Protection

Finally, title protection programs represent one of the lowest levels of regulation. Only those who satisfy certain prescribed requirements may use the relevant prescribed title(s). Practitioners need not register or otherwise notify the state that they are engaging in the relevant practice, and practice exclusivity does not attach. In other words, anyone may engage in the particular practice, but only those who satisfy the prescribed requirements may use the enumerated title(s). This serves to indirectly ensure a minimal level of competency – depending upon the prescribed preconditions for use of the protected title(s) – and the public is alerted to the qualifications of those who may use the particular title(s).

Licensing, certification and registration programs also typically involve some kind of mechanism for removing individuals from practice when such individuals engage in enumerated proscribed activities. This is generally not the case with title protection programs.

### Regulation of Businesses

As regulatory programs relate to businesses, they can enhance public protection, promote stability and preserve profitability. But they can also reduce competition and place administrative burdens on the regulated businesses.

Regulatory programs that address businesses can involve certain capital, bookkeeping and other recordkeeping requirements that are meant to ensure financial solvency and responsibility, as well as accountability. Initially, these requirements may serve as barriers to entry, thereby limiting competition. On an ongoing basis, the cost of complying with these requirements may lead to greater administrative costs for the regulated entity, which costs are ultimately passed on to consumers.

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Many programs that regulate businesses involve examinations and audits of finances and other records, which are intended to ensure that the relevant businesses continue to comply with these initial requirements. Although intended to enhance public protection, these measures, too, involve costs of compliance.

Similarly, many regulated businesses may be subject to physical inspections to ensure compliance with health and safety standards.

### *Sunset Process*

Regulatory programs scheduled for sunset review receive a comprehensive analysis. The review includes a thorough dialogue with agency officials, representatives of the regulated profession and other stakeholders. To facilitate input from interested parties, anyone can submit input on any upcoming sunrise or sunset review via DORA's website at: [www.dora.state.co.us/pls/real/OPR\\_Review\\_Comments.Main](http://www.dora.state.co.us/pls/real/OPR_Review_Comments.Main).

The regulatory functions of the Colorado Department of Agriculture (CDA) relating to the Colorado Seed Act (CSA) in Article 27 of Title 35, Colorado Revised Statutes (C.R.S.), shall terminate on July 1, 2009, unless continued by the General Assembly. During the year prior to this date, it is the duty of DORA to conduct an analysis and evaluation of the CDA pursuant to section 24-34-104, C.R.S.

The purpose of this review is to determine whether the CSA should be continued for the protection of the public and to evaluate the performance of the CSA and staff of the CDA. During this review, the CDA must demonstrate that the regulation serves to protect the public health, safety or welfare, and that the regulation is the least restrictive regulation consistent with protecting the public. DORA's findings and recommendations are submitted via this report to the legislative committee of reference of the Colorado General Assembly.

### *Methodology*

As part of this review, DORA staff toured seed warehouses, interviewed CDA staff, interviewed representatives of the Colorado Seed Growers Association and the Colorado Seed Industry Association. DORA staff also reviewed Colorado statutes and CSA rules, and reviewed the laws of other states.

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## *Profile of the Program*

Colorado's crop and grazing lands are major natural resources that support the state's agricultural industry. In fact, of Colorado's 66.3 million acre total land base, approximately 10.5 million acres are cropland, including 3.4 million irrigated acres.<sup>2</sup> According to information provided by CDA staff, the top five crops in Colorado are as follows:

- Wheat – 2,520,000 acres;
- Corn – 1,200,000 acres;
- Millet (a variety of grasses) – 270,000 acres;
- Sorghum (cereal crop) – 190,000 acres; and
- Sunflowers – 155,000 acres.

Because Colorado's cropland is an important component in the state's agricultural industry, the CDA is charged with providing a regulatory model to protect consumers related to the seed industry. In order to provide adequate consumer protection, the intent of the CSA is to prevent the distribution of poor quality seeds to consumers that could result in low crop yields, poor crop quality and the spread of noxious weeds.<sup>3</sup>

Noxious weeds are produced from plants that are especially troublesome and detrimental and could cause damage or loss to a considerable portion of the land or livestock of a community.<sup>4</sup> There are two types of noxious weed seeds: prohibited and restricted.

Prohibited noxious weed seeds are the seeds of perennial, biennial and annual weeds which are highly detrimental and especially difficult to control.<sup>5</sup> If prohibited noxious weeds are identified, the seed cannot be sold for propagation.

Restricted noxious weed seeds are very objectionable in fields, lawns and gardens but can be controlled by good agricultural practices.<sup>6</sup>

The CDA also utilizes the services of the Colorado Seed Laboratory (CSL) within Colorado State University, Department of Soil and Crop Sciences to provide reliable and consistent seed test results for commercial, certification and research applications.<sup>7</sup> The CSL is a recognized Association of Official Seed Analysts (AOSA) laboratory. The purpose of AOSA is to seek uniformity and accuracy in methods, results and reports<sup>8</sup> related to seed testing.

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<sup>2</sup> Colorado. *Phase VI*. Retrieved June 20, 2008, from <http://neh-usain.mannlib.cornell.edu/essays/PhaseVIColorado.doc>

<sup>3</sup> Colorado Seed Laboratory. *Seed Law*. Retrieved June 2, 2008, from <http://www.colostate.edu/Depts/SoilCrop/extension/CSGA/CSL/SeedLaw.htm>

<sup>4</sup> § 35-27-103(16), C.R.S.

<sup>5</sup> § 35-27-103(16)(a), C.R.S.

<sup>6</sup> § 35-27-103(16)(b), C.R.S.

<sup>7</sup> Colorado Seed Laboratory. *Colorado Seed Programs*. Retrieved June 23, 2008, from <http://seedlab.colostate.edu/>

<sup>8</sup> Association of Official Seed Analysts, Inc. *AOSA*. Retrieved June 23, 2008, from <http://www.aosaseed.com/>

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The CSL utilizes the tolerances adopted in the AOSA's rules and regulations in order to determine whether a sample of seeds have an acceptable deviation from the contents outlined on the label. For instance, the percentage of germination (the emergence and development from the seed embryo) or number of noxious weeds present is required to be within an acceptable tolerance.

The CSL performs seed testing in accordance with the International Seed Testing Association (ISTA) guidelines. The ISTA produces international rules for seed sampling and testing.<sup>9</sup>

The CSL is equipped to perform a variety of tests on seeds, including, but not limited to:

- Purity analysis testing;
- Germination testing; and
- Tetrazolium testing.

Purity analysis testing is done to determine the percentage of pure seeds, other crop seeds, weed seeds, and inert material (e.g., soil, insect parts, etc.) in the seed lot.<sup>10</sup> A lot is defined in the CSA as a definite quantity of seed identified by a lot number or other mark.<sup>11</sup>

Germination testing is defined as the emergence from the seed embryo of those essential structures which, for the kind in question, are indicative of the ability to produce a normal plant under favorable conditions.<sup>12</sup>

Tetrazolium (TZ) testing serves as an estimate regarding seed viability. TZ testing is more labor intensive than germination testing,<sup>13</sup> but usually produces results in a more timely manner.

The Colorado Seed Growers Association (CSGA), which consists of individuals from the seed industry, provides certification of various types of seeds in Colorado. The purpose of seed certification is to make available to the public high quality seed of superior crop varieties grown and distributed to ensure genetic identity and purity.<sup>14</sup>

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<sup>9</sup> International Seed Testing Association. *Welcome to ISTA Online!* Retrieved June 23, 2008, from <http://www.seedtest.org/en/home.html>

<sup>10</sup> Colorado Seed Laboratory. *CSL Seed Analysis Testing Information*. Retrieved June 23, 2008, from <http://seedlab.colostate.edu/TestingInfo.htm>

<sup>11</sup> § 35-27-103(15), C.R.S.

<sup>12</sup> Colorado Seed Laboratory. *CSL Seed Analysis Testing Information*. Retrieved June 23, 2008, from <http://seedlab.colostate.edu/TestingInfo.htm>

<sup>13</sup> FRSA. *Seed Analysis Fact Sheet*. Retrieved June 23, 2008, from <http://www.frsa.org/SAfacts/SAFTZ.html>

<sup>14</sup> Colorado Seed Growers Association. *Colorado Seed Certification Standards*. Retrieved June 23, 2008, from <http://seeds.colostate.edu/CSGA/documents/standards/2008StandardsUpdateFinal.pdf>

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In Colorado, there are seven classes of seeds or propagating materials recognized in seed certification, including;

- Breeder;
- Foundation;
- Registered;
- Certified;
- Tested;
- Selected; and
- Source-Identified.

Breeder seeds are seeds or vegetative propagating material directly controlled by the originating or, in certain cases, the sponsoring plant breeder, institution or firm that provides the source for the initial and recurring increase of foundation seeds.<sup>15</sup>

Foundation seeds are seed stock that most nearly maintain specific genetic identity and purity, and may be designated or produced by an agricultural experiment station or originator.<sup>16</sup> Foundation seeds are the source of registered or certified seeds.<sup>17</sup>

Registered seeds are the progeny (offspring) of foundation seeds.<sup>18</sup> Registered seeds are the parent stock for the production of certified seeds.<sup>19</sup>

Certified seeds are the progeny of foundation or registered seeds that are handled to maintain satisfactory genetic identity and purity and have been approved and certified by the CSGA.<sup>20</sup>

Additionally, tested seeds require progeny testing to prove that traits of interest are heritable in succeeding generations.<sup>21</sup> Testing procedures (number of sites, generations required, etc.) are outlined for each species by the CSGA.<sup>22</sup>

Selected seeds come from rigidly selected woody species or stands that have promise of genetic superiority, but may or may not have been progeny tested.<sup>23</sup>

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<sup>15</sup> Colorado Seed Growers Association. *Colorado Seed Certification Standards*. Retrieved June 23, 2008, from <http://seeds.colostate.edu/CSGA/documents/standards/2008StandardsUpdateFinal.pdf>

<sup>16</sup> Colorado Seed Growers Association. *Colorado Seed Certification Standards*. Retrieved June 23, 2008, from <http://seeds.colostate.edu/CSGA/documents/standards/2008StandardsUpdateFinal.pdf>

<sup>17</sup> Colorado Seed Growers Association. *Colorado Seed Certification Standards*. Retrieved June 23, 2008, from <http://seeds.colostate.edu/CSGA/documents/standards/2008StandardsUpdateFinal.pdf>

<sup>18</sup> Colorado Seed Growers Association. *Colorado Seed Certification Standards*. Retrieved June 23, 2008, from <http://seeds.colostate.edu/CSGA/documents/standards/2008StandardsUpdateFinal.pdf>

<sup>19</sup> Colorado Seed Growers Association. *Colorado Seed Certification Standards*. Retrieved June 23, 2008, from <http://seeds.colostate.edu/CSGA/documents/standards/2008StandardsUpdateFinal.pdf>

<sup>20</sup> Colorado Seed Growers Association. *Colorado Seed Certification Standards*. Retrieved June 23, 2008, from <http://seeds.colostate.edu/CSGA/documents/standards/2008StandardsUpdateFinal.pdf>

<sup>21</sup> Colorado Seed Growers Association. *Colorado Seed Certification Standards*. Retrieved June 23, 2008, from <http://seeds.colostate.edu/CSGA/documents/standards/2008StandardsUpdateFinal.pdf>

<sup>22</sup> Colorado Seed Growers Association. *Colorado Seed Certification Standards*. Retrieved June 23, 2008, from <http://seeds.colostate.edu/CSGA/documents/standards/2008StandardsUpdateFinal.pdf>

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Finally, Source-Identified seeds may be seeds from either natural stands with geographic source and elevation known or plantations or shelter-belts of known geographic location.<sup>24</sup>

### ***History of Regulation***

The CDA was created in 1949. However, the State of Colorado has regulated seed production since 1929, when the seed inspection and registration law was enacted.

The modern CSA was originally enacted in 1943. The CSA was revised in 1982 and then again in 1993. The 1993 revisions were a result of a sunrise application submitted to DORA by the Colorado Seedsmen's Association and the CSGA. The purpose of the sunrise application was to gain additional financial support for CDA personnel to continue the effective administration of the CSA.

The sunrise application asked for a registration system to be established for seed sellers in Colorado, which would be accompanied by a registration fee. In addition to establishing a fee structure for seed sellers in Colorado, the 1993 revisions empowered the Commissioner of Agriculture (Commissioner) to impose fines of up to \$2,500 per offense and to revoke a seed seller's registration when a violation of the CSA occurs.

DORA also completed a sunset review of the CSA and the Seed Advisory Committee (Committee) in 1998. The 1998 sunset review included several recommendations to improve the CSA. For instance, the sunset review recommended to sunset the Committee. The purpose of the Committee was to advise the Commissioner on matters related to rules and regulations of the CSA. However, the Committee met sparingly to make recommendations to the Commissioner. In fact, the 1998 sunset review found that the Committee met only five times during an eight year period.

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<sup>23</sup> Colorado Seed Growers Association. *Colorado Seed Certification Standards*. Retrieved June 23, 2008, from <http://seeds.colostate.edu/CSGA/documents/standards/2008StandardsUpdateFinal.pdf>

<sup>24</sup> Colorado Seed Growers Association. *Colorado Seed Certification Standards*. Retrieved June 23, 2008, from <http://seeds.colostate.edu/CSGA/documents/standards/2008StandardsUpdateFinal.pdf>

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## Legal Framework

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### *Federal Laws*

Federal laws that are relevant to the Colorado Seed Act (CSA) are the federal Seed Act (FSA), 7 U.S.C. sections 1551 through 1610, and the Plant Variety Protection Act (PVPA), 7 U.S.C. sections 2321 through 2582.

The FSA is administered by the United States Department of Agriculture. The purpose of the FSA is to regulate interstate and foreign commerce in agricultural and vegetable seeds.<sup>25</sup> The basic objectives of the FSA are threefold:<sup>26</sup>

- To require specified labeling on the containers of seeds transported in interstate commerce;
- To prevent misrepresentation in the labeling and advertising of seeds in interstate and foreign commerce; and
- To require that imported seeds meet certain minimum standards of quality.

Additionally, the PVPA was originally signed into law in 1970, and later amended in 1994.<sup>27</sup> The PVPA creates a voluntary program that provides patent-like rights to breeders, developers and owners of plant varieties.<sup>28</sup>

The PVPA provides:<sup>29</sup>

- Developers of new varieties of plants patent-like rights that protect reproduction and distribution of their varieties;
- Varieties that are protected under the PVPA can be sold as seed stocks only with permission of the certificate holder and in some cases, only as a class of certified seed;
- Varieties that are protected must have labels on the seed containers indicating the type of protection; and
- Farmers may save a limited amount of seed for replanting, but cannot sell it to anyone without permission of the owner.

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<sup>25</sup> Agricultural Research Center. *Summary Statement on the Federal Seed Act*. Retrieved June 25, 2008, from <http://www.rngr.net/Publications/tpn/15/PDF.2004-08-16.1240/file>

<sup>26</sup> Agricultural Research Center. *Summary Statement on the Federal Seed Act*. Retrieved June 25, 2008, from <http://www.rngr.net/Publications/tpn/15/PDF.2004-08-16.1240/file>

<sup>27</sup> Colorado State University. *The Plant Variety Protection Act*. Retrieved May 29, 2008, from <http://www.ext.colostate.edu/pubs/crops/00301.html>

<sup>28</sup> Colorado State University. *The Plant Variety Protection Act*. Retrieved May 29, 2008, from <http://www.ext.colostate.edu/pubs/crops/00301.html>

<sup>29</sup> Colorado State University. *The Plant Variety Protection Act*. Retrieved May 29, 2008, from <http://www.ext.colostate.edu/pubs/crops/00301.html>

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## State Law

The CSA is found in section 35-27-101, *et seq.*, Colorado Revised Statutes, (C.R.S.). The Colorado Department of Agriculture (CDA) is responsible for administering and enforcing the provisions of the CSA. The purpose of the CSA is to prevent the distribution and use of poor quality seed through the regulation of the labeling, the labelers and the sellers of seeds for propagation in Colorado.

Funding for the CSA is generated by revenue obtained through registration fees and from a General Fund appropriation.

Persons who label, sell or custom clean seeds in Colorado must be registered by the CDA. Seeds are defined in the CSA as agricultural, vegetable, ornamental, shrub or tree seeds for propagation.<sup>30</sup>

The Commissioner of Agriculture (Commissioner) is responsible for promulgating rules necessary for the administration and enforcement of the CSA as well as performing the following:

- Set forth methods to inspect, sample, analyze and test seeds, including defining acceptable tolerances;
- Amend the lists of both prohibited and restricted noxious weed seeds;
- Establish procedures and standards to embargo seeds;
- Notify any person who transported, sold, bartered or distributed seeds which do not test in compliance with the provisions in the CSA; and
- Enforce any disciplinary actions authorized by the CSA.

The Commissioner can also issue letters of admonition or deny, suspend, refuse to renew or revoke any registration if a registrant:<sup>31</sup>

- Refuses or fails to comply with any provision of the CSA or corresponding rules;
- Is convicted of a felony for an offense related to the CSA;
- Has a registration or license denied, revoked or suspended in any other state;
- Refuses to provide information related to a registrant's business when requested by the Commissioner; or
- Falsifies any information requested by the Commissioner.

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<sup>30</sup> § 35-27-103(23), C.R.S.

<sup>31</sup> § 35-27-117(1)(a-e), C.R.S.

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The Commissioner may also impose an embargo on seeds that are adulterated, misbranded or not correctly labeled pursuant to the CSA.<sup>32</sup>

Once an embargo is imposed by the Commissioner, no person can remove or dispose of the embargoed seeds until the Commissioner grants permission for removal or disposal.<sup>33</sup> The owner of the embargoed seeds may correct any violation within 30 days; however, if the violation is not corrected within 30 days, the Commissioner may proceed with the condemnation of the seeds.<sup>34</sup>

Additionally, the Commissioner may impose a civil penalty for any violation of the CSA or associated rules, not to exceed \$2,500 per violation.<sup>35</sup> The assessment of the civil penalty is at the discretion of the Commissioner who may take into consideration the severity of the violation, the presence or absence of a pattern of similar violations and the effect of the proposed penalty on the registrant to continue to conduct business.<sup>36</sup>

The Commissioner must appoint an arbitration council if a buyer of seeds requests arbitration and files a formal complaint with the Commissioner along with the accompanying fee (currently \$10). The arbitration council includes three members. Each of the following persons is required to recommend one member:<sup>37</sup>

- The Dean of the College of Agriculture, Colorado State University;
- The president of the Colorado Seedsmen's Association; and
- The president of any organization of farmers in the state as the Commissioner determines to be appropriate.

The CSA delineates that every container of seeds for sale, bartered or distributed for propagation must have a label that is plainly written or printed and provides the following information:<sup>38</sup>

- Statement that the seeds are treated, the name of the chemical used to treat the seeds and whether the chemical is harmful to humans or animals;
- Name or kind and variety for each seed in excess of five percent of the whole and the percentage of weight of each;
- Lot number or other identification;
- Percentage, by weight, of all weed seeds;
- Name and rate of occurrence per pound of each kind of restricted noxious weed present;
- Percentage, by weight, of agricultural seeds (which may be also designated as crop seeds) other than those required to be named on the label;

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<sup>32</sup> § 35-27-119(1)(a)(I)(A, B), C.R.S.

<sup>33</sup> 35-27-119(2)(c), C.R.S.

<sup>34</sup> 35-27-119(4), C.R.S.

<sup>35</sup> § 35-27-118(1)(c), C.R.S.

<sup>36</sup> § 35-27-118(1)(b)(I), C.R.S.

<sup>37</sup> § 35-27-122(1)(a)(II-IV), C.R.S.

<sup>38</sup> Colorado Department of Agriculture. *Rules and Regulations – Colorado Seed Act. Part 3 – Label Requirements for Agricultural, Vegetable and Flower Seeds.*

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- Percentage of inert matter;
  - Percentage of germination and hard or dormant seeds, if present;
  - Calendar month and year that the test was completed to determine percentages;  
and
  - Name and address of the seed labeler or seed seller.

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## Program Description and Administration

The Colorado Department of Agriculture (CDA) administers and enforces the Colorado Seed Act (CSA).

To effectively administer and enforce the CSA and the associated rules in Colorado, the CDA allocated 1.42 full-time equivalent (FTE) employees, which provided professional support in fiscal year 06-07. The 1.42 FTE providing professional support of the seed inspection program are as follows:

- Administrative Assistant – 1.0 FTE;
- Inspectors – 0.37 FTE; and
- Program Coordinator – 0.05 FTE.

The seed program is funded by revenue generated by registration fees and from a General Fund appropriation. Table 1 illustrates the expenditures for the administration and enforcement of the seed program, including contracts with the Colorado Seed Laboratory (CSL) within Colorado State University, Department of Soil and Crop Sciences. The analysis of seed samples by the CSL is funded through both General Fund and cash fund appropriations.

**Table 1  
Seed Program Expenditures**

Fiscal Year	General Fund Expenditures	Cash Fund Expenditures	Total Expenditures
02-03	\$128,740	\$52,040	\$180,780
03-04	\$93,018	\$61,567	\$154,585
04-05	\$83,525	\$68,797	\$152,322
05-06	\$103,951	\$69,210	\$173,161
06-07	\$114,625	\$69,289	\$183,914

Table 2 highlights the total amount allocated for the services of the CSL for fiscal years 02-03 through 06-07.

**Table 2  
Total Funds Allocated for Contract Services with the Colorado Seed Laboratory**

Fiscal Year	Total Funds Allocated
02-03	\$39,828
03-04	\$55,000
04-05	\$57,000
05-06	\$55,400
06-07	\$56,000

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## *Registrations*

The CSA requires the registration of the following:

- Custom Seed Conditioners;
- Farmer Seed Labelers;
- Retail Seed Dealers; and
- Seed Labelers.

A Custom Seed Conditioner engages in the business of conditioning seeds with either a stationary or portable seed cleaner.<sup>39</sup> To become registered as a custom seed conditioner, a person must complete an application and pay an annual registration fee of \$300. If there is more than one custom seed conditioner location, a registration fee of \$25 must be paid to CDA for each additional location.

A Farmer Seed Labeler labels only seed produced for sale on property owned or rented by such person or such person's employer in Colorado.<sup>40</sup> Currently, to become registered as a Farmer Seed Labeler, a person must complete a CDA application and pay a \$75 annual registration fee. Again, if a Farmer Seed Labeler has more than one location, an additional \$25 registration fee for each additional location must be paid.

A Retail Seed Dealer engages in the business of selling seeds at retail facilities.<sup>41</sup> Retail Seed Dealers are required to complete an application and pay an annual \$25 registration fee to the CDA. Each subsequent Retail Seed Dealer store must pay an additional \$25 fee annually to the CDA.

A Seed Labeler engages in the business of labeling seed for sale and whose name and address appear on the label.<sup>42</sup> To register as a Seed Labeler, a person is required to complete an application and pay an annual \$300 registration fee. Each subsequent registration under the initial registrant is required to pay a \$25 fee to the CDA.

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<sup>39</sup> § 35-27-103(7), C.R.S.

<sup>40</sup> § 35-27-103(10), C.R.S.

<sup>41</sup> § 35-27-103(21), C.R.S.

<sup>42</sup> § 35-27-103(24), C.R.S.

Table 3 illustrates the total number of CDA-registered Custom Seed Conditioners, Farmer Seed Labelers, Retail Seed Dealers and Seed Labelers for fiscal years 02-03 through 06-07.

**Table 3**  
**Total Number of Seed Registrants**

Fiscal Year	Custom Seed Conditioners	Farmer Seed Labelers	Retail Seed Dealers	Seed Labelers	Total
02-03	33	38	802	144	1,017
03-04	26	48	875	153	1,102
04-05	23	47	948	138	1,156
05-06	21	37	945	143	1,146
06-07	22	45	903	149	1,119

The data in Table 3 indicate that the number of Custom Seed Conditioners has decreased from 33 in fiscal year 02-03 to 22 in fiscal year 06-07. CDA staff was unable to explain the decrease.

The increase, as the data highlight in Table 3, in Farmer Seed Labelers may be attributable to a civil fine that was issued to a Farmer Seed Labeler who was selling seed without obtaining the required certification for Plant Variety Protected varieties. According to CDA staff, the enforcement action taken by the CDA may have encouraged some Farmer Seed Labelers to become registered.

The increase in Retail Seed Dealers is attributable to the growth in large retail facilities opening and obtaining the required registration from the CDA.

As outlined in Table 3, the number of Seed Labelers has remained fairly constant during the last five fiscal years.

### ***Inspections***

In Colorado, seeds are inspected to prevent the distribution and use of poor seed for propagation. In order to achieve this goal, the CDA employs inspectors who conduct inspections at both seed warehouses and retailers that sell seeds.

In addition to inspecting seeds, inspectors are responsible for inspections of the following programs, including, but not limited to:

- Pesticides;
- Pesticide applicators;
- Organic certification; and
- Groundwater management.

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Generally, most of the inspections of seeds are completed by inspectors at seed warehouses because the majority of seeds are stored in seed warehouses. Inspectors attempt to complete the majority of inspections at seed warehouses in late winter and early spring because the carry-over seeds (seeds from the previous year's stock) have been retested and have a current germination date. Also, the new seeds have been delivered for the growing season. This allows seed inspections to be completed when the seed warehouses are at the highest level of inventory.

Inspectors complete inspection of seeds at retail facilities in conjunction with nursery inspections.

The first component an inspector looks for during an inspection is the label on the bags of seeds. Because different types of seeds require different information on the label, the inspector checks to ensure that the information on the label within a lot does not contain out of date seed test dates.

Upon reviewing the labels at a seed warehouse, the inspector determines a specific lot to sample.

Additionally, seed labels are required to contain the following information:

- The kind and variety of seeds;
- The date of the germination test;
- The germination percentage;
- The hard or dormant seed percentage (if any);
- The name and address of the labeling company;
- The breakdown of purity of the kinds and varieties of seeds within the lot (listed as the percentage of the total contents of the bag);
- The percentage of inert matter (e.g., soil, insect parts, etc.);
- The percentage of weed seeds (not to exceed two percent of the total by weight);  
and
- Other crop seeds.

In order for seed components to be listed as a stated part of the seed for mixtures and blends, each component must be at least five percent of the total, otherwise the seed components are required to be listed under the other crop seed heading.

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Table 4 delineates the total number of inspections conducted by CDA for fiscal years 02-03 through 06-07.

**Table 4**  
**Total Number of Inspections of Seeds for Fiscal Years 02-03 through 06-07**

Fiscal Year	Seed Inspections
02-03	739
03-04	757
04-05	846
05-06	661
06-07	810

### *Complaints/Disciplinary Actions*

One of the responsibilities of the CDA is to field complaints concerning the CSA. If a complaint is filed, CDA staff initiates an investigation, which entails issuing a letter to the registrant informing him or her that a complaint has been filed. The CDA has several options in resolving complaints, including, but not limited to:

- Dismissing the complaint;
- Issuing a warning letter; and
- Issuing a fine.

Additionally, complaints filed with the CDA concerning seeds that do not produce can be addressed through an arbitration council. A buyer of the seed can request arbitration by filing a verified complaint with the Commissioner of Agriculture (Commissioner) and pay the required filing fee (currently \$10).

Upon completion of an investigation by the Commissioner, the results of the investigation are referred to the arbitration council. The arbitration council, in turn, issues a report that includes:<sup>43</sup>

- Findings of fact;
- Conclusions of law; and
- Recommendations as to the costs, if any, including but not limited to the costs of any investigation conducted by the Commissioner.

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<sup>43</sup> § 35-27-122(2)(e), C.R.S.

Table 5 illustrates the complaint history related to the CSA for fiscal years 02-03 through 06-07.

**Table 5  
Total Number of Complaints for Fiscal Years 02-03 through 06-07**

<b>Fiscal Year</b>	<b>Number of Complaints</b>	<b>Outcome</b>
02-03	-	-
03-04	-	-
04-05	1	Complaint dismissed by the Arbitration Council
05-06	1	\$1,333 fine issued
06-07	3	Two fines issued totaling \$7,000, one complaint referred to the USDA

Additionally, the CDA may also issue cease and desist orders or issue an embargo for violations of the CSA. Cease and desist orders can be issued by field inspectors if they identify issues related to a particular lot of seeds, including, but not limited to:

- Incomplete label;
- No labels; or
- Expired germination test date.

The CDA can also issue a cease and desist order if the CSL, after analyzing a sample of seeds, determines that the seed sampled is not accurate or within acceptable tolerance of the information provided on the label.

Table 6 highlights the total number of cease and desist orders issued by the CDA for fiscal years 02-03 through 06-07, as well as the type of violation. Because inspectors utilize a random sampling technique, the numbers of violations for specific violations tend to vary. For example, the data for cease and desist orders related to the viability of seeds varies from 8 in fiscal year 02-03 to 21 in fiscal year 06-07, which is attributable to the random sampling process.

**Table 6  
Total Number of Cease and Desist Orders Issued for Failed Seed Laboratory Tests in Fiscal Years 02-03 through 06-07**

<b>Violation Type</b>	<b>FY 02-03</b>	<b>FY 03-04</b>	<b>FY 04-05</b>	<b>FY 05-06</b>	<b>FY 06-07</b>
Viability	8	6	5	16	21
Purity	22	19	8	13	13
Weed	0	0	3	1	1
Restricted Noxious Weeds (RNW)	0	7	14	7	13
Prohibited Noxious Weeds (PNW)	5	2	2	1	2
Purity and Viability	0	1	3	4	4
Purity and RNW	0	1	0	1	1
RNW and PNW	0	0	0	1	1
Viability and RNW	0	0	1	0	0
Viability and PNW	0	1	0	0	0
Incomplete Label	0	2	1	0	0
<b>Total</b>	<b>35</b>	<b>39</b>	<b>37</b>	<b>44</b>	<b>56</b>

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## Analysis and Recommendations

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### *Recommendation 1 – Continue the Colorado Seed Act for 11 years, until 2020.*

The first sunset criterion asks whether regulation is necessary to protect the public from harm. The purpose of the Colorado Seed Act (CSA) is to prevent the distribution of poor quality seeds to consumers that could result in low crop yields, poor crop quality and the spread of noxious weeds.<sup>44</sup> In order to adequately protect the public, the Colorado Department of Agriculture (CDA), is charged with enforcing the CSA.

To achieve an appropriate level of consumer protection concerning seeds in Colorado, the CDA utilizes a regulatory framework that includes:

- Registering Custom Seed Conditioners, Farmer Seed Labelers, Retail Seed Dealers, and Seed Labelers;
- Conducting inspections of seed labels;
- Sampling seed at wholesale and retail facilities; and
- Imposing discipline for violations of the CSA.

As of fiscal year 06-07, there were a total of 1,119 registered Custom Seed Conditioners, Farmer Seed Labelers, Retail Seed Dealers, and Seed Labelers in Colorado.

The registration system, which requires a person to complete an application and pay an applicable fee, enables the CDA to effectively track and monitor individuals who are active in the seed industry in Colorado to ensure that they are adhering to the CSA. The registration system also enables the CDA to identify and impose discipline upon a registered individual in violation of any provision of the CSA when necessary.

Without a registration system, the CDA would not have a central system for identifying, and ultimately monitoring, individuals who are active in selling, labeling and conditioning seeds in Colorado. The absence of a registration system would make it more difficult to determine who and how many individuals, are active in the seed industry. This could present problems for the CDA concerning the enforcement of the CSA, which could potentially compromise the quality of seeds sold in Colorado. The result could be a proliferation of poor quality seeds, which could result in poor crop yields and the spread of noxious weeds. This could leave the consumer vulnerable to harm.

Additionally, CDA staff conducts inspections of seeds at both wholesale and retail facilities in Colorado. Seed inspections ensure that seeds for sale to the public contain proper labels. The absence of seed inspections could compromise consumer protection by exposing consumers to poor quality seeds.

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<sup>44</sup> Colorado Seed Laboratory. *Seed Law*. Retrieved June 2, 2008, from <http://www.colostate.edu/Depts/SoilCrop/extension/CSGA/CSL/SeedLaw.htm>

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In order to provide effective protection to the public, the CDA also utilizes the Colorado Seed Laboratory (CSL) within Colorado State University, Department of Soil and Crop Sciences, to analyze samples of seeds taken by inspectors during inspections to ensure that the information outlined on the seed label is accurate and within acceptable tolerance, which serves to insulate the consumer from poor quality seeds.

Also, the Commissioner of Agriculture (Commissioner) may administer the following actions for violations of the CSA:

- Cease and desist orders;
- Injunctions;
- Civil penalties (up to \$2,500 per violation);
- Embargo of seed; or
- Criminal penalty upon conviction (class 1 misdemeanor).

As demonstrated by the information provided by the CDA for this review, the CSA is effective in regulating the seed industry in Colorado. This is illustrated by the fact that the number of complaints filed during the last five fiscal years and the number of disciplinary actions are relatively low compared to the volume of seed sold in Colorado. The lack of complaints and disciplinary actions may be due to the fact that CDA staff takes a proactive stance in assisting registrants with compliance versus applying strict enforcement of the CSA, which includes imposing discipline.

The registration system, inspection, sampling of seed, and the various forms of disciplinary actions available to the Commissioner serve to insulate the consumer from harm. The absence of regulation could result in the distribution of poor quality seeds to consumers that could result in poor crop yields, poor crop quality and the potential spread of noxious weeds.

During this sunset review, the Department of Regulatory Agencies did not identify any major policy issues associated with the CSA. Instead, this review revealed that the current CSA is providing effective protection to Colorado consumers; therefore, the General Assembly should continue the CSA for 11 years, until 2020.

***Administrative Recommendation 1 – Post current rules related to the CSA on the CDA website.***

Currently, the rules related to the CSA are not available to the public or registrants *via* the CDA website. The absence of the rules on the CDA website presents a potential barrier to both consumers and registrants in obtaining the most current rules related to the CSA.

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The rules are an important component for the effective regulation of the seed industry in Colorado. For example, the rules outline the information required to be included on a seed label. Limiting access to the current rules could compromise a registrant's ability to provide seed labels in accordance with the requirements outlined in rule.

The CDA website is a useful and convenient resource for information concerning the seed industry in Colorado. Therefore, providing the rules on the CDA website would serve as an additional resource for both consumers and registrants, and would foster an environment that improves access to information. Improving accessibility could potentially increase the individuals who have knowledge of the regulation of the seed industry in Colorado.

In sum, posting current rules related to the CSA offers an additional venue for both the public and registrants to easily access information related to the regulation of seeds in Colorado. The rules exist to protect the public, but if consumers and registrants cannot access them, public protection is potentially jeopardized. Therefore, the CDA should post the current rules related to the CSA on its website.