

National Organic Standards Board
Certification, Accreditation, Compliance Subcommittee (CACS)
Consistency in Organic Seed Use Discussion Document
August 5, 2025

Summary:

The Certification, Accreditation, Compliance Subcommittee (CACS) seeks to identify strategies for increasing the amount and variety of organic seed that is commercially available and used in organic production, as well as reducing barriers to achieving that progress. It is clear that these tools and barriers vary significantly across the organic sector. As a step in this process, this discussion document focuses on barriers to organic seed production that limit availability and use of organic seed.

Background:

Organic producers are generally required to use organically grown seeds (7 U.S.C. 6508(a); 7 CFR 205.204). Nonorganically produced, untreated seeds may only be used “when an equivalent organically produced variety is not commercially available” (7 CFR 205.204(a)(1)). “Commercially available” is defined as “the ability to obtain a production input in an appropriate form, quality, or quantity to fulfill an essential function in a system of organic production or handling, as determined by the certifying agent in the course of reviewing the organic plan” (7 CFR 205.2).

In August 2005 and November 2008, the NOSB made recommendations on implementation of the commercial availability requirement, and in 2013, the National Organic Program (NOP) issued Guidance 5029, which outlines procedures for verifying compliance with the commercial availability requirement. The relevant statutory, regulatory, and guidance texts were attached to the Fall 2024 discussion document on this topic as Appendix A. The NOSB made additional recommendations for rulemaking and strengthening Guidance 5029 in 2018 and 2019, respectively. The 2018 and 2019 recommendations were summarized in Appendix B to the [Fall 2024 Discussion Document](#).

In Fall 2024, the NOSB sought public input on a number of questions, to guide the next steps in its work to improve consistency in organic seed use. Questions addressed whether there is ongoing support for the 2018 and 2019 recommendations, the organic seed supply chain and other factors that influence organic seed use, access to information and research, and comparisons to other regulatory schemes. NOSB did not present a document at the Spring 2025 meeting but still received comments on seed issues.

Discussion:

It was clear from feedback the NOSB received from stakeholders in Fall 2024 and Spring 2025 that the availability and use of organic seed is highly dependent on crop and location-specific factors. Furthermore, ongoing concerns about fair competition, continued innovation, and meeting consumer demand factor into producer decisions. Seeds have become more expensive, partly due to increased market power of seed companies (Fuglie and MacDonald, 2023). Although financial factors are not a permitted justification for sourcing nonorganic seed, cost does appear to have a significant influence on organic seed use (or lack thereof).

Barriers to organic seed production, in particular, seem to significantly limit growth in organic seed use. This Discussion Document identifies several of these barriers and potential approaches to lowering them.

Technical production challenges

Certain seed crops are challenging to produce organically, which limits the availability of organic seed in those areas. In addition, organic production is more challenging in certain climates and regions, due to pest and disease pressure and resource needs. Organic carrot seeds, for example, are apparently challenging to produce and consequently availability remains low (Padel et al., 2021).

To address these challenges, seed producers need access to more varieties developed for organic systems and relevant technical assistance.

Time horizon, cost of innovation, and planning

The time horizon for seed production, generally, is long and expensive. Industry analysis indicates that the average cost of research and development for a new variety is about \$12 million (Linder, 2025). It takes an average of 7 to 10 years to bring a new variety to market (Linder, 2025). This time horizon may be extended even further if organic producers need to transition land or complete the certification process. In part because of the long-time horizon for bringing a seed crop to market, and the high dollar costs for research and development, the up front investment required for organic seed production is significant. Understanding which crops are best suited for organic seed production would help direct limited research funds.

Market and demand uncertainty and risk

The organic market has grown and shifted significantly since the NOP regulations were adopted. The combination of the long time horizon for bringing seeds to market and the commercial availability rules may reduce incentives for developing organic seed. The risk management tools (e.g., crop insurance, contracting support) for organic seed producers may not be equivalent to those available to nonorganic producers, and the lack of those tools may further disincentivize organic seed production. Extreme market concentration may prevent new organic seed producers from entering the marketplace.

Certification process

Organic seed producers report that the certification process is extremely time consuming and complex, particularly if they produce both organic and nonorganic seed.

Isolation of crops

Drift of both pesticides and genetics presents an additional barrier to organic seed production. Organic producers are required to maintain buffers to protect crops from contamination. The significant space requirements for isolating individual varieties as well as protecting them from off-farm drift adds to the costs and physical challenges to organic seed production.

Intellectual property and access to genetics

The seed sector is increasingly consolidated, with few companies controlling a significant portion of seed genetics, and the pool of varieties available to organic seed producers is further constrained by the factors described above. In some cases, the intellectual property owner will not sell the license to particular seed varieties to other breeders, so it is legally impossible to develop an organic version of the seed crop. In other cases, contractual obligations between seed producers and distributors dramatically limit the outlets available for marketing organic seed options, and even untreated seed options.

Questions:

1. What other challenges limit organic seed production?
2. What solutions could lower barriers to organic seed production?

Subcommittee Vote:

Motion to accept the discussion document on Consistency in Organic Seed Use.

Motion by: Allison Johnson

Seconded by: Carolyn Dimitri

Yes: 5 No: 0 Abstain: 0 Recuse: 0 Absent: 1

References

Fuglie, K. & J. MacDonald. 2023. Expanded Intellectual Property Protections for Crop Seeds Increase Innovation and Market Power for Companies. Amber Waves. Economic Research Service, USDA.

Linder, J. 2025. Seed Industry Statistics. <https://gitnux.org/seed-industry-statistics/>.

Padel, S., Orsini, S., Solfanelli, F., & Zanolli, R. (2021). Can the Market Deliver 100% Organic Seed and Varieties in Europe? *Sustainability*, 13(18), 10305. <https://doi.org/10.3390/su131810305>.

NOP Guidance 2029: <https://www.ams.usda.gov/sites/default/files/media/5029.pdf>