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## I. Introduction

A thriving agricultural sector depends on fair competition, including access to diverse seed options at fair prices. A 2023 report by the United States Department of Agriculture (USDA), More and Better Choices for Farmers, addresses the impacts of consolidation in the seed industry. Farmers, independent seed companies, and plant breeders have voiced concerns about concentrated market power in the seed industry leading to unfair contracts and a decline in competition.1

The seed industry has consolidated significantly over the past few decades.<sup>2</sup> Prior to the 1970s, public plant breeding was responsible for developing many new crop varieties.3 Farmers could save seed year to year.4 Under the 1970 Plant Variety Protection Act (PVPA), some new plant varieties became subject to intellectual property protections.5 The Act contains exceptions to allow seedsaving, research, and breeding.6 However, beginning with a 1980 Supreme Court decision and affirmed through later cases, plants and plant components became recognized as eligible subject matter for utility patents.7 These types of patents grant much more expansive rights to the patent holder. This change has made investment in crop development more lucrative for private companies, especially for

A thriving agricultural sector depends on fair competition, including access to diverse seed options at fair prices.

genetically modified crops.8 The result has been seed industry consolidation, resulting in fewer seed options for farmers, sold by fewer companies. Today, the three largest companies in the US are Bayer, Corteva, and Syngenta (owned by ChemChina).

To secure their intellectual property, large seed companies require farmers to sign a contract before accessing their seeds. This is particularly true for commodity crops, including corn, soybeans, and cotton. As this guide will show, the contract terms available to farmers barely differ among the largest seed companies. Due to the dominance of a few suppliers in the seed market, commodity farmers have few options but to accept these contracts' restrictive terms.

## **DEFINING TERMS**

## Seed Contract and Technology Use Agreement

There is no standard name for the contracts farmers sign to access seeds, but companies often call them technology use agreements or technology stewardship agreements. In this guide we will refer to them as technology use agreements or seed contracts, using these terms interchangeably. In some contexts, a seed contract may refer to a contract to grow seed for companies; however, for the purposes of this guide, we use the term to refer to a technology use agreement for a farmer to access seeds to grow crops.

## WHAT DOES THIS GUIDE DO?

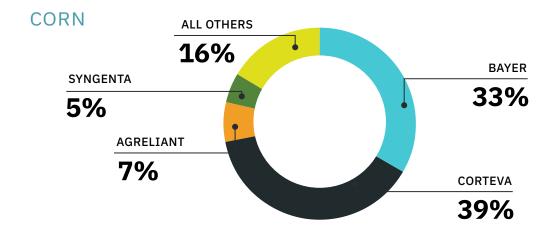
This guide has two primary goals: to provide transparency and aid understanding of the fine print in technology use agreements for commodity seeds used by the largest seed companies, and to offer a larger context for how consolidation in the seed industry affects farmers in the United States. Part II of this guide introduces important legal context for technology use agreements. Part III analyzes contracts between the three largest seed companies—Bayer, Corteva, and Syngenta—and individual growers of commodity crops. 9 By understanding their legal obligations, commodity growers can better protect themselves from inadvertently breaching their contracts and jeopardizing their relationships with seed companies.

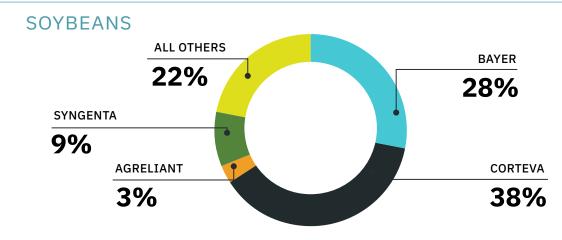


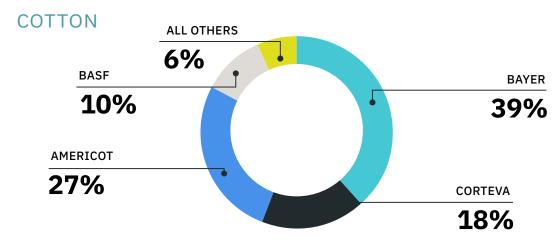
#### CONCENTRATION IN THE SEED INDUSTRY

Four companies (Bayer, Corteva, ChemChina/Syngenta, Limagrain) account for over 50% of global commercial seed sales.<sup>10</sup> In the United States, four companies (Corteva, Bayer, AgReliant, Syngenta) control 80% of corn seed sales and 75% of soybean seed sales.<sup>11</sup>

The graphic below shows market concentration in seed sales for three commodity crops.







Source: MACDONALD, ET AL., supra note 2, at 11.

## II. Legal Context for Technology Use Agreements

This section provides a brief overview of key concepts in contract and intellectual property law that are important to understanding technology use agreements.

### WHAT IS A CONTRACT?

A contract is an agreement enforceable by law in which the parties exchange promises for something of legal value. In the case of technology use agreements, farmers exchange money, the promise to use the seeds as directed by the companies, and certain legal rights to license the companies' seed technologies. The legal rights that farmers waive include certain privacy rights and legal remedies for dispute resolution.

## WHAT IS INCLUDED IN A TECHNOLOGY USE AGREEMENT?

It is critical for farmers to understand the terms included in technology use agreements. Importantly, the contract terms include more than just the document that farmers sign. The signed agreement typically incorporates other documents by reference, which then become part of the binding contract language.

It is equally important to understand what does not count as a contract term. Any communication between the parties that is not explicitly incorporated into the agreement is not included in the contract terms and is therefore unenforceable as part of the contract. This includes any oral communication between the farmer and the company, their representatives or their dealers.

## **CONTRACT LANGUAGE**

#### **▶** WHAT IT MEANS

#### Syngenta:

This Agreement (including the most current Stewardship Guide and form of this Agreement), together with the terms on the label of packaging containing Seed Products, constitute the entire agreement between Grower and Syngenta.

This language establishes what is and is not included in the contract between the grower and Syngenta. Specifying that the named documents "constitute the entire agreement" clarifies that any communications that take place outside of those documents do not create legally enforceable obligations.

## Documents incorporated into seed contracts typically include:

**The Technology Use Agreement signed by growers.** Different companies use different names for this document, but they have similar content. The term technology in the contract broadly covers traits, germplasm, seed treatments, and other seed products developed by the company.



**Technology Stewardship** Agreement



Technology Use Agreement



**SYNGENTA** Stewardship Agreement

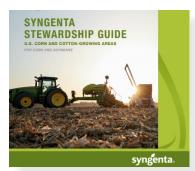
The Technology Use Guide that accompanies the agreement. This guide lays out the agronomic practices that the company requires farmers to follow when using the seeds. It may include a supplementary insect resistance management guide if applicable. Companies have different user guides for different crops and may also refer to them as stewardship guides or product use guides.



**BAYER** Technology User Guide



**CORTEVA Product Use Guide** 



**SYNGENTA** Stewardship Guide

"Bag tags" on seed packaging. Seed bags and packets often include legally binding terms. The three companies discussed in this guide explicitly incorporate their bag tag language in their technology use agreements. The reverse is also often true—bag tags themselves often incorporate the full technology use agreement by reference, meaning that by opening the bag, growers agree to the full contract. Other bag tags include legal language that may not refer to the technology use agreement. Even farmers who do not sign a technology use agreement are subject to the terms on the bag tag.

If a farmer fails to follow any of the terms that are found in any of these documents, they risk breaching their contract with the company.

## Can the Terms of the Agreement Change?

All three seed companies' contracts include clauses allowing the company to unilaterally change or update the terms of the agreement. This means that when they change the terms, the grower is legally responsible to abide by the new terms. Because of this, it is important for farmers to be aware of and review any communications the company sends about updated terms. The Syngenta and Corteva contracts say that the grower agrees in advance that any updates or modifications made by the company go into effect as soon as they have been posted to designated websites. Bayer's contract says that once the company posts an update to the contract terms, growers are considered to have assented to the new terms once they use the technology or after 30 days elapse, whichever comes first. While a farmer can reject contract updates and terminate the contract, that action may jeopardize their ability to access seed products from that company in the future.

## WHAT ROLE DOES INTELLECTUAL PROPERTY PROTECTION PLAY IN SEED CONTRACTS?

The technology use agreements discussed in this guide concern seeds that typically have intellectual property (IP) protections associated with them. Different types of IP protections confer different rights on their owners, with utility patents conferring stronger IP protections than plant variety protections (see discussion box on the next page).

Seed contracts may refer to patented or otherwise protected technologies within the contract language, but the contracts themselves set limits on farmers' use of seeds that can be more restrictive than those created by the underlying IP law. Because the contract creates a legally binding agreement, those more restrictive terms are enforceable.

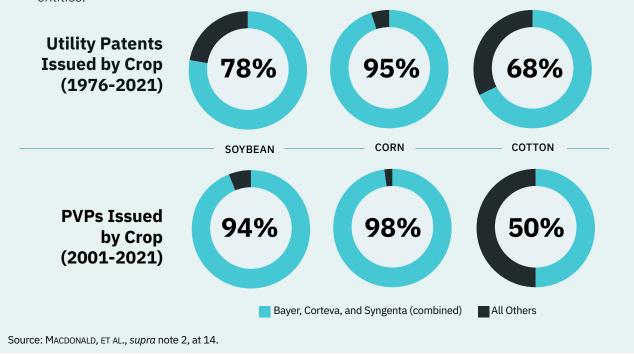


## **INTELLECTUAL PROPERTY IN SEEDS: UTILITY PATENTS AND PLANT** VARIETY PROTECTION CERTIFICATES

Two types of intellectual property protections are most relevant to commodity seed contracts. The first is utility patents. In the US, an individual or a company who patents an invention is granted an exclusive right to sell or otherwise commercialize the technology for 20 years.<sup>12</sup> Patents are granted by the United States Patent and Trademark Office.<sup>13</sup> Seed companies may obtain patents for plant varieties whether these varieties are transgenic or conventionally bred.14 Patents can also cover genetically engineered traits that are incorporated into plant varieties. 15 Advantages conferred by patented traits can include a range of characteristics such as higher yield; improved market characteristics; adaptation to different growing conditions; or pest, disease, or herbicide resistance.

Plant variety protection certificates (PVPs) are another form of intellectual property protection used for crops. PVPs are only available for new and distinct plant varieties and are granted by the USDA.<sup>16</sup> Unlike patented technologies, plants protected by PVPs can be used in research subject to certain limitations on creating similar varieties and making them commercially available.<sup>17</sup> However, these practices are generally prohibited by technology use agreements. In recent decades, the number of utility patents acquired by seed companies has exceeded PVPs in most commodity crops.18

Mergers and acquisitions of smaller seed companies by larger players like Bayer, Corteva, and Syngenta over the past few decades have resulted in a few players dominating seed IP ownership.<sup>19</sup> The charts below show the percentages of each type of intellectual property protection for major commodity crops issued to Bayer, Corteva, and Syngenta versus all other entities.



#### Sale of Goods vs. License

Once a technology is protected by a patent, the patent holder has the exclusive right to sell that technology. However, once a patented item is sold, the patent protection is generally exhausted, so the buyer has broad latitude to use or resell the item.<sup>20</sup> (In the seed context, this framework is complicated by seeds' ability to self-replicate.)<sup>21</sup> To avoid patent exhaustion, patent holders sometimes avoid selling their technology outright in favor of licensing it instead.

With a license, the owner of the intellectual property grants others permission to use the technology while it is still under patent. The patent (or PVP) holder can limit the use of the technology granted by the license under contract law, even though intellectual property law would not grant the patent holder the same power. The contracts described in this guide are not sales of seeds but rather licenses for growers to use the intellectual property in the seed. Licensing agreements afford companies the opportunity to dictate how their technologies can be used, whether or not they are patented.<sup>22</sup>



## III. Understanding the Contract

Commodity seed contracts pack a lot of terms into their fine print. This section of the guide will break down key terms in the technology use agreements to clarify what farmers are restricted from doing, what they are obligated to do, and what could happen should a legal dispute arise. For a comparison of the specific terms in the Bayer, Corteva, and Syngenta contracts, see the chart at the end of this section.

## WHAT DOES THE CONTRACT RESTRICT FARMERS FROM DOING?

In technology use agreements, companies licensing their technologies typically restrict farmers from using the seeds in the following ways:

### **Growers Cannot Save Seeds**

The limited license allows farmers to use the seeds for only one growing season. In other words, seeds cannot be saved, replanted, transferred, or sold. These activities constitute a breach of contract (and in many cases patent infringement) by reproducing the protected technology.

## Growers Cannot Use Seeds for Research Purposes (Performed by Them or Any Other Person or Entity)

For varieties covered by a plant variety protection certificate, it is important to note that with this contract term, companies restrict the use of the variety beyond the protection afforded by the PVP, as PVPs have a carve-out for research involving the protected technology.<sup>23</sup> However, there is nothing that legally prevents companies from contracting around this statutory protection.



## WHAT DOES THE CONTRACT REQUIRE FARMERS TO DO?

The previous section covered aspects of contracts that require farmers to promise *not* to do something. Other terms require that farmers promise to do something. These requirements to act fall into two buckets: to abide by the technology use guide (and other applicable agronomic and marketing guidelines); and to follow the requirements of other companies that have a stake in the licensed technology.

## **Required Practices and Farming Methods**

The technology use guide lays out the farming methods and practices the company requires farmers to use when growing seeds with licensed technology. The technology use agreement and bag tag may contain additional requirements. Some commonly required practices include:

- Inspection and reporting requirements for weed and pest resistances;
- Planting refuges to prevent pest resistances; and
- Following the company's insect resistance management guide (depending on the product).

## Adherence to Terms of Other Companies

Because seed companies frequently cross-license technology to one another, the seeds a farmer gets may include protected products from more than one company. For example, Syngenta's 2021 technology agreement points to more than 50 patents cross-licensed from Bayer, Corteva, and BASF. Technology use agreements hold farmers responsible for following the terms of other companies that have their intellectual property included in the licensed seeds.

## WHAT RIGHTS DOES THE CONTRACT GIVE TO THE SEED COMPANY?

## Right of Entry

In technology use agreements, farmers allow companies to access their property for data collection and observation. This includes the right to take video or photos of farming practices and to physically access the land and certain vehicles and structures on it. Companies may collect samples and use data gathered on the farm to investigate farmers for alleged contract violations or patent infringement, such as replanting saved seed.

#### **▶** CONTRACT LANGUAGE

#### WHAT IT MEANS

#### Corteva:

For the term of this [technology use agreement] and for one year following its termination, Grower hereby grants Corteva, the Representatives and their respective employees, contractors, subcontractors, agents and designees (collectively, "Personnel"), the complete and unencumbered right, at all times, to:

- (i) observe and/or take video and/or **pictures** of the crop or Seed, farming activities, spray or other applications, and harvesting activities; and/or
- (ii) enter upon and have reasonable ingress to and egress from...the property where Grower has planted or is storing or growing Seed...similar access to any refuge area and bins, wagons, tractor trailers or seed storage containers for purposes of data collection, field and crop inspection, testing and examining the land and Grower's crop and taking samples of soil, crops, crop residue or **seeds located thereon...**shall be performed by Personnel only after Corteva or the Representatives deliver or mail to Grower written notification of the Personnel's visit at least three (3) days in advance and Corteva or the Representative also have reasonably attempted to discuss the visits with Grower in advance of such visits... [emphasis added]

Corteva's right of entry clause includes several key aspects:

- There are no time restrictions to the right (e.g., it is not limited to business hours);
- Corteva can take videos or pictures of farm activities;
- Corteva personnel can physically enter the property where seed is planted or stored, as well as seed storage locations and refuge areas where Corteva seeds are not planted;
- Corteva personnel can inspect, test, and take samples of soil, crops, crop residue, or seeds:
- Corteva must attempt to discuss the visit with the grower in advance. with three days' written notification; and
- Corteva retains this right for a year in the event the contract is terminated.

#### **Data Collection**

By signing a seed contract, farmers consent to the company's collection, use, and disclosure of their personal information. Personal information means any information that is linked or reasonably linked to an identified individual.<sup>24</sup> In Corteva's Privacy Rights Statement, farmers' personal information is collected, used, sold, shared, and disclosed for a variety of purposes, such as to "exercise or defend the legal rights of Corteva and its officers, directors, employees, customers, contractors, and agents and for dispute resolution."25 Corteva's Privacy Rights Statement says that a farmer "hereby consents to the collection, use and disclosure of Grower's Personal Information by and between: (i) Corteva; (ii) retailers, including but not limited to Seed Sellers, from which Grower purchases Corteva products; (iii) Corteva partners and service providers." Bayer's contract gives the company the right "to obtain Grower's internet or cell phone service provider records to validate Grower's electronic signature, if applicable."

## WHAT HAPPENS IF THERE IS A LEGAL DISPUTE?

Seed contracts include provisions to protect seed companies' interests in the event of legal disputes with farmers. These provisions determine where and how disputes will be heard, what possible remedies each party to the contract can be awarded, and even which law will be applied.

### **Timeline for Claims**

Each contract sets a timeline establishing when a farmer can bring a claim against the company. If the farmer lets too much time pass between the issue leading to the suit and the time they bring the claim, the farmer may forfeit the right to bring the claim. These timelines vary slightly between companies. Bayer and Syngenta allow a window of 30 days from the discovery of an issue for the farmer to bring a claim against the company; Corteva allows only a 15-day window. Bayer further specifies that the claim cannot be made after the expiration date of the seeds or two years after the farmer acquires the seeds. Syngenta also limits claims to within one year after the date that the seeds were acquired.

	TIME BETWEEN DISCOVERY OF ISSUE AND CLAIM	TIME BETWEEN PURCHASE AND CLAIM	EXPIRATION DATE
Bayer	30 days	2 years	Cannot bring claim post expiration date
Corteva	15 days	Not specified	Not specified
Syngenta	30 days	1 year	Not specified

#### Choice of Law

Each of these agreements includes a choice of law provision, which means that the companies have chosen the state whose laws will be applied to the contract in case of a dispute. This is significant because each state's contract law is slightly different. Companies typically choose the state where they are headquartered because they employ lawyers who are experts in that state's laws.

BAYER	CORTEVA	SYNGENTA
Missouri	Iowa	Minnesota

## Class Action Waiver

Bayer and Corteva's agreements include a class action waiver. This means that the farmer agrees not to participate in a class action lawsuit if a dispute should arise with the company. Syngenta's agreement does not include a class action waiver.

#### **Arbitration**

Bayer has a mandatory arbitration clause. This clause requires disputes between farmers and companies to be resolved through arbitration, preventing farmers from taking the company to court.

## **Company Attorney Fees**

All three companies require farmers to pay for the companies' legal fees and any costs from the companies' investigations into a farmer's breach or infringement of the technology user agreement.

## **DEFINING TERMS**

A class action lawsuit is a legal tool used when many people have suffered the same harm from the same source, but it would not be feasible for everyone to sue separately. Instead, the court allows one plaintiff or a small group of plaintiffs to represent the interests of a larger group of people alleging similar harms.

**Arbitration** is a dispute resolution process that takes place outside of court. The parties agree to submit their dispute to one or more arbitrators, whose decision on the dispute is legally binding.

## **▶** CONTRACT LANGUAGE

#### Syngenta:

Grower agrees that Syngenta and any owners of the Patents shall be entitled to recover any costs or expenses, including reasonable attorney's fees, incurred in enforcing its or their rights under this Agreement.

## **▶** WHAT IT MEANS

The attorney fee provision applies not only to Syngenta's attorney fees but also the fees of other companies Syngenta is licensing technology from.

### Remedies

#### For Farmers

If the company is found to be at fault in a dispute, the technology use agreements specify that the only available remedy for farmers is a refund of the price of the seed (or sometimes replacement of the seed). This means that the companies cannot be held liable for any damages beyond the cost of the seed.

## For Companies

In the technology use agreements, the companies reserve more remedies for themselves than they do for farmers.

- **Injunctive relief:** The companies can obtain injunctive relief if a farmer breaches the contract, which means they can stop the farmer from selling or using seed in a way that is prohibited by the contract.
- Damages: While the agreements limit damages the company would pay if they were at fault, they do not limit the damages that the farmer would pay if the farmer were found to be at fault.

#### **▶** CONTRACT LANGUAGE

#### **▶** WHAT IT MEANS

#### Bayer:

The parties agree that patent infringement and/ or breach of contract damages are difficult to calculate, and agree that for cotton, soybean, and wheat Seed that has been saved and planted by Grower, the reasonable royalty for patent infringement and/or breach of contract damages shall be \$250 per unit of soybean Seed, \$1,000 per unit of herbicide tolerant cotton Seed, \$2,000 per unit of insect protected/herbicide tolerant cotton Seed, and \$50 per bushel of wheat Seed... Patent infringement and/or breach of contract damages for other unauthorized activities (including, but not limited to, unauthorized sales and transfers of Seed as well as unauthorized activities pertaining to other crops) will be separately calculated.

Unique among the three companies, Bayer sets up a scale for damages to be paid by a farmer at fault for saving and planting seed.

However, they keep the door open for other possible damages if the farmer has breached the contract in other ways.

**Prohibition of future licenses:** Both Bayer and Syngenta specify in their agreements that if a previous license agreement is terminated because the farmer breached it, the company reserves the right to refuse a license to the farmer in the future.

## **CONTRACT COMPARISON CHART**

	BAYER	CORTEVA	SYNGENTA
Are seed saving or research allowed?	No.	No.	No.
Can the seed company change the terms of the contract?	Yes. Bayer can unilaterally change the agreement. Continued use of products by the grower or the passage of 30 days, whichever comes first, is considered consent to the new terms.	Yes. Continued use of Corteva's products constitutes an acceptance of the new terms.	Yes.
Does the seed company have the right to enter the farmer's property?  How much notice must be given to the farmer before entry?	Yes. Grower consents to access to land and any seed storage container to take samples for the company and its representatives.  Bayer may enter seven days after written notice.	Yes. Grower consents to complete and unencumbered access to land and seed storage for data collection for the company and its personnel.  Grower consents to photos and/or video of farming activities to be taken.  Corteva may enter after three days' notice.	Yes. Grower consents to the company and its representatives to access land where their seed has been planted in prior years and is currently growing for sample collection.  No notice is required.
Can the seed company collect personal data?	Yes. Grower consents to the use, collection, and disclosure of personal information.  Bayer may obtain Grower's internet or cell phone service provider records to validate Grower's electronic signature, if applicable.	Yes. Grower consents to the use, collection, and disclosure of personal information.	Not specified in the contract.
If there is a legal dispute, what state's law is applied?	Missouri	Iowa	Minnesota

	BAYER	CORTEVA	SYNGENTA
Are disputes required to go to arbitration?	Yes.	Yes.	No.
Can farmers join a class action?	No.	No.	Yes.
How much could farmers be required to pay seed companies for violations?	<ul> <li>\$250 per unit of soybean seed.</li> <li>\$1,000 per unit of herbicide tolerant cotton seed.</li> <li>\$2,000 per unit of insect protected/herbicide tolerant cotton seed.</li> <li>\$50 per bushel of wheat seed.</li> <li>Additional damages may also be calculated separately.</li> </ul>	Not specified in the contract.	Not specified in the contract.
Are farmers required to pay seed company attorney fees?	Yes, and any costs related to the case plus other expenses incurred.	Yes, and any costs or expenses, including, but not limited to, court costs or reasonable attorney fees.	Yes. Syngenta and any owners of the patents shall be entitled to recover any costs or expenses, including reasonable attorney fees.
What can a farmer recover from a seed company?	Only the cost paid for the seed or the cost of replacement seed.	Only the cost paid for the seed or the cost of replacement seed.	Only the cost paid for the seed.

#### **ENDNOTES**

- AGRIC. MKTG. SERV., U.S. DEP'T OF AGRIC., MORE AND BETTER CHOICES FOR FARMERS: PROMOTING FAIR COMPETITION AND INNOVATION IN SEEDS AND OTHER AGRICULTURAL INPUTS 3 (2023), <a href="https://www.ams.usda.gov/sites/default/files/media/SeedsReport.pdf">https://www.ams.usda.gov/sites/default/files/media/SeedsReport.pdf</a>.
- 2 MACDONALD, J. M., DONG, X., & FUGLIE, K., ECON. RES. SERV., U.S. DEP'T OF AGRIC., EIB-256, CONCENTRATION AND COMPETITION IN U.S. AGRIBUSINESS 7 (2023), https://doi.org/10.32747/2023.8054022.ers.
- 3 *Id.*
- 4 Id.
- 5 Id.
- 6 7 U.S.C. §§ 2543–2544.
- See Diamond v. Chakrabarty, 447 U.S. 303 (1980) (establishing the subject matter eligibility of living organisms); Ex Parte Hibberd, 227 U.S.P.Q. (BNA) 443 (Bd. Pat. App. & Interf. 1985) (holding that utility patents could be issued for sexually reproducing plants); J.E.M. Ag Supply v. Pioneer Hi-Bred Int'l, 534 U.S. 124 (2001) (finding that the availability of other forms of intellectual property protections for plants did not preclude plants' subject matter eligibility for utility patents).
- 8 MACDONALD ET AL., supra note 2.
- This guide examines publicly available versions of each of the three companies' technology use agreements from 2024. Bayer 2024 U.S. Technology Stewardship Agreement, <a href="https://tug.bayer.com/tsa/united-states/">https://tug.bayer.com/tsa/united-states/</a> permalink: <a href="https://perma.cc/3V2W-38W5">https://perma.cc/3V2W-38W5</a>; Corteva Non-Executable Technology Use Agreement, <a href="https://www.corteva.us/content/dam/dpagco/corteva/na/us/en/files/trait-stewardship/DOC-Corteva-Agriscience-TECHNOLOGY-USE-AGREEMENT-US-June-2024-Data-Entry-Form-Non-Executable.pdf">https://www.corteva.us/content/dam/dpagco/corteva/na/us/en/files/trait-stewardship/DOC-Corteva-Agriscience-TECHNOLOGY-USE-AGREEMENT-US-June-2024-Data-Entry-Form-Non-Executable.pdf</a> permalink: <a href="https://perma.cc/NMX7-EHN6">https://perma.cc/NMX7-EHN6</a>; Syngenta Stewardship Agreement, <a href="https://www.syngenta-us.com/corn/agrisure/agrisure-stewardship">https://www.syngenta-us.com/corn/agrisure/agrisure-stewardship</a> permalink: <a href="https://perma.cc/H7RG-3AAT">https://perma.cc/NH7RG-3AAT</a>. Large seed companies often enter into licensing agreements with independent seed growers as well—those contracts are not addressed in this guide.
- HANNAH ANDREW, ADDRESSING CONSOLIDATION IN AGRICULTURE: USDA'S RESPONSE TO PRESIDENT BIDEN'S DIRECTIVE TO PROMOTE COMPETITION IN THE AMERICAN ECONOMY, VT. L. CTR. FOR AGRIC. & FOOD SYS, 3 (2022) (citing Mary Hendrickson et al., The Food System: Concentration and its Impacts 3 (2020) (providing a list of the four companies: Corteva, Bayer, Syngenta, and BASF)), <a href="https://www.vermontlaw.edu/wp-content/uploads/2024/07/Addressing-Consolidation-in-Agriculture.pdf">https://www.vermontlaw.edu/wp-content/uploads/2024/07/Addressing-Consolidation-in-Agriculture.pdf</a>.
- 11 MACDONALD, ET AL., suprα note 2, at 11.
- 12 35 U.S.C. § 154.
- 13 35 U.S.C. § 153.
- See Brief for the United States as Amicus Curiae Supporting Respondent at 15, J.E.M. AG SUPPLY V. PIONEER HI-Bred Int'l, 534 U.S. 124 (2001) (describing the reliance interests of both conventional plant breeders and genetic engineers in the ongoing availability of intellectual property, including utility patents, for plant varieties).
- 15 Ex Parte Hibberd, *suprα* note 7.
- 16 7 U.S.C. §§ 2402, 2482.
- 17 7 U.S.C. §§ 2433-2434.
- 18 AGRIC. MKTG. SERV., suprα note 1, at 21.
- 19 MACDONALD, ET. AL., supra note 2, at 14.
- 20 Impression Products v. Lexmark, 581 U.S. 360, 366 (2017).
- 21 See Bowman v. Monsanto (finding patent infringement when a farmer replanted patented seed).
- 22 Elizabeth I. Winston, Why Sell What You Can License? Contracting Around Statutory Protection of Intellectual Property, 14 GEO. MASON L. REV., 94, 95 (2006).
- 23 7 U.S.C. § 2544.
- 24 See, e.g., Corteva, U.S. Privacy Notice, Corteva, Inc., <a href="https://www.corteva.com/us-privacy-rights.html">https://www.corteva.com/us-privacy-rights.html</a> (last visited June 27, 2024).
- Id. (Residents of some states have rights under state-specific privacy laws. For example, California law provides individuals the right to limit the use or disclosure of data companies collect. California Consumer Privacy Act of 2018, as amended, Cal. Civ. Code §§ 1798.100–1798.199.100.)

