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Farm Bill Primer: Selected Hemp Industry Issues

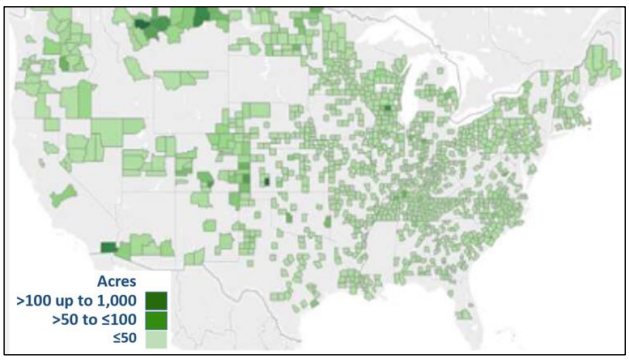
Hemp is a variety or cultivar of *Cannabis sativa*—the same plant as marijuana—grown to produce nonpsychoactive food, beverage, consumer, and industrial products. *Hemp* is defined in statute as the *Cannabis sativa* plant and any part of that plant, including its seeds, cannabinoids, and isomers, with a delta-9 tetrahydrocannabinol (THC) concentration of "not more than 0.3 percent on a dry weight basis" (7 U.S.C. §1639o). The 2018 farm bill (P.L. 115-334; Agriculture Improvement Act of 2018) legalized hemp by removing *hemp* (as defined) from the definition of *marijuana* in the Controlled Substances Act (CSA, 21 U.S.C. §§802 et seq.). The 2018 farm bill further directed the U.S. Department of Agriculture (USDA) to create a framework to regulate hemp cultivation under federal law and facilitate commercial cultivation, processing, marketing, and sale of hemp and hemp-derived products. USDA published its final hemp regulations in 2021. Other 2018 farm bill provisions made hemp producers eligible for federal crop insurance and agricultural research programs. Despite these policy changes in the 2018 farm bill, Congress may consider further amendments as it starts to debate the next farm bill.

Overview of U.S. Hemp Cultivation

USDA reports that in 2021—the first year official USDA data has been collected—U.S. hemp growers planted 54,200 acres of hemp while harvesting about 33,500 acres, accounting for a small share of total U.S. harvested cropland acres (<0.1%). The difference between planted and harvested hemp acres may reflect the difference between legal hemp that falls within legal THC limits and noncompliant (or "hot") hemp that may not enter allowable U.S. marketing channels. USDA estimates about 20% of hemp grown during the crop year will exceed legal THC limits, demonstrating the inherent risks to farmers of growing hemp within USDA's regulatory framework.

Currently hemp is grown in all U.S. states under a USDA-approved state plan or a USDA general license. The leading hemp producing states with more than 1,000 harvested acres (2021) were Montana (4,500 acres), Colorado (3,100), Minnesota (2,300), California (2,250), Utah (2,150), North Carolina/Oregon (1,850 each), South Dakota (1,700), Kentucky (1,500), Missouri (1,150), Vermont (1,080), and Texas (1,070) (**Figure 1**). Production by state tends to be highly variable year-to-year. The 2021 farm-level value of hemp produced was $824 million across an estimated 13,000 grower licenses. This total spans the leading hemp markets based on the part of the plant used: fiber, grain, seed, and flower. Some suggest there may be a separate market category for the plant's extracted compounds that may be derived either from the plant's flowers and trim or from its total biomass (including sticks and stems). For more background on the leading markets for hemp, see CRS In Focus IF11860, *Production, Marketing, and Regulation of Hemp Products*.

Figure 1. Hemp Acreage by County, 2020



Source: Graphic is a reprint with permission from the American Farm Bureau Federation, which excludes data for Hawaii and Alaska, although USDA reports production in both states.

Table 1 shows USDA reported data for 2021 on the farm-level value, volume, and harvested acres by the leading hemp markets (i.e., fiber, grain, seed, flower) based on growing system (i.e., whether grown in the open field outdoors or under protection, such as in a greenhouse or indoor facility). As shown, production of floral hemp grown in the open was the dominant type of hemp grown in 2021, as measured by total value and acreage. By comparison, the value and acreage dedicated to hemp fiber, grain, and seed production was lower. Floral hemp tends to command higher market prices compared with other marketable uses for hemp.

Table 1. Farm-Level Value of U.S. Hemp Production by Production Type and by Market Segment (2021)

Production Type	Market Value $million	Prod. (million pounds)	Acres	Avg. Yield
Floral (open)	623.0	19.7	16,000	1,235
Grain (open)	6.0	4.4	8,255	530
Fiber (open)	41.4	33.2	12,700	2,620
Seed (open)	41.5	1.9	3,515	530
All Types (protection)	112.0	NA	NA	NA

Source: USDA, *National Hemp Report*, 2022. Reported acres are not additive given multi-crop production in some cases.

Addressing Hemp in the Next Farm Bill

Industry interests related to hemp cover many national and regional groups with different policy goals and priorities. These priorities often are tied to the primary products they produce and/or represent or may be based on the part of the hemp plant used (e.g., whether hemp is grown for fiber for industrial uses or for use in seed-derived food ingredients

[hulled seed, seed protein powder, and seed oil]) that the Food and Drug Administration (FDA) has acknowledged as *generally recognized as safe* (GRAS) or whether hemp is grown for flower for use as a dietary supplement or wellness product.

Most national farm and herbal/dietary supplement groups, as well as some state and professional organizations, have developed policy positions related to hemp. In addition, over the years, numerous hemp-specific interest groups have emerged. Some national hemp producer groups (ranked by year founded) are Hemp Industries Association (1994); Vote Hemp (2000); National Hemp Association (2014); U.S. Hemp Roundtable (2017); National Industrial Hemp Council (2019); U.S. Hemp Growers Association (2019); and the American Trade Association for Cannabis and Hemp (2019). These interest groups often have differing priorities, which may complicate U.S. hemp policymaking. Moreover, the interests of these groups often span the use of hemp as an industrial input, as a food ingredient, and as a dietary supplement ingredient.

Calls to Modify USDA's Hemp Regulation

A possible shared policy priority among these interest groups is to relax some of USDA's regulatory requirements, which some grower groups and state regulators contend are overly restrictive and impractical. For example, some stakeholders want to reduce the oversight role of the Drug Enforcement Administration (DEA) in regulating hemp, including removing the requirement that hemp be tested at DEA-registered labs or that eligible testing labs be DEA-accredited. Some groups want to repeal the existing exclusion preventing most persons with a felony controlled substance-related conviction from obtaining a hemp license. Congress specifically included DEA's consultative role in USDA's regulation and the felon exclusion in the 2018 farm bill. H.R. 6645 seeks to remove these requirements.

Others want to amend the statutory definition of hemp to raise the allowable legal THC level from 0.3% to 1% (e.g., S. 1005; H.R. 6645) to provide flexibility to growers and avoid crop destruction if hemp fields exceed the legal THC threshold. Many are calling for establishing laboratory standards. Some groups oppose USDA's regulatory requirement that testing for THC content of a hemp sample be based on Total THC, which includes the potential conversion of tetrahydrocannabinolic acid into THC, rather than the delta-9 THC concentration specified in hemp's statutory definition. USDA reconsidered alternative testing methods but retained Total THC as the testing because not all testing methods include decarboxylation, among other reasons (see 86 *Federal Register* 5619-5621). Decarboxylation refers to the process that activates the psychoactive compounds in the cannabis plant. Changes to USDA's testing methods could require USDA to conduct rulemaking and comment procedures, which could further delay development of the U.S. hemp industry.

Another regulatory aspect USDA reconsidered but retained was its decision that its hemp regulation would not require the use of government-certified or approved seed for planting or processing. Hemp regulations in certain other countries require the use of certified hemp seed. USDA claims that developing certified seed requirements would necessitate additional rulemaking. The agency's rationale for not adopting a certified seed requirement is documented in USDA's final rule (86 *Federal Register* 5625-5626).

Finally, some suggest separate requirements should apply to different end-products. For example, H.R. 6645 would either exempt or relax regulatory requirements for hemp fiber and grains as compared to adult-use cannabinoid products. In general, most countries with legalized hemp and other cannabis varieties, including the United States, regulate hemp fiber and grain separately from hemp cannabinoids, including low-THC cannabis extracts.

Addressing Concerns About Product Safety

The 2018 farm bill addressed hemp cultivation only and did not directly address some consumer products containing hemp or hemp ingredients subject to FDA regulation. The 2018 farm bill explicitly preserved FDA's authority related to hemp products (§10113), and it remains unclear whether changes to FDA laws and regulations fall within the jurisdiction of the agriculture committees. FDA has continued to evaluate the safety of hemp-derived cannabinoid products, including cannabidiol (CBD), and FDA has not yet approved these products as safe for public use. As such, some hemp consumer products remain unapproved and unregulated. Certain legislative proposals would remove FDA restrictions on the marketing of food and dietary supplements containing added hemp-derived cannabinoids (e.g., H.R. 841; S. 1698); other proposals seek to establish federal quality and safety standards as well as labeling requirements for products containing hemp-derived cannabinoids (H.R. 6134). Separately, promulgating pesticide residue limits for hemp foods and products would facilitate product marketing. Some propose excluding synthetic derivatives that may not be naturally occurring in the plant from the statutory definition of hemp (e.g., H.R. 6645). Still others seek to ban certain hemp derivatives and cannabinoids, as some consumer products have been shown to pose a risk to public safety and because of ongoing concerns about FDA oversight of these products.

Calls to Enhance USDA Support for Hemp

Most hemp advocates seek to expand USDA farm program support for hemp and hemp products. This includes efforts to expand research related to genetics and management practices and targeted support to develop processing capacity of hemp fibers for use in insulation, construction materials, and plastics. Some call for expanding support for hemp climate-smart and sustainability practices, promoting hemp's soil carbon sequestration and phytoremediation properties. Others seek to add hemp to the statutory definition of a specialty crop (7 U.S.C. §1621 note), which most fruit and vegetable groups oppose. Designating hemp as a specialty crop could qualify hemp for USDA programs that tie eligibility to the specialty crop definition. Expanding federal crop insurance and improved risk management tools are a priority for some, given the risks involved in growing hemp (see CRS In Focus IF11919, Federal Crop Insurance for Hemp Crops), along with improving access to credit and banking services (as addressed by H.R. 1996 and S. 910).

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