

ORGANIC COTTON: PRODUCTION AND MARKET TRENDS IN THE UNITED STATES AND CANADA - 2001 AND 2002

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Abstract

Based on the Organic Trade Association's (OTA's) recent survey of U.S. organic cotton producers, farmers in five states harvested 9,897 bales of organic cotton from 11,316 acres in 2001, for an overall yield of 0.87 bales per acre. Of the 11,586 acres of organic cotton planted in seven states in 2001, 270 acres were lost to weather problems. In 2002, farmers in five states planted organic cotton on 9,044 acres, a 22 percent decrease. A growing number of large U.S. and Canadian companies in 2002 have committed to using organic cotton in their products.

Background

What is OTA?

The Organic Trade Association is the membership-based business association representing the organic industry in North America. OTA's Fiber Council (OFC), was established in 1997 to focus on issues particular to the organic fiber sector, including organically grown cotton, wool, flax, hemp and silk.

What is Organic Cotton?

The term "organic" refers to the way agricultural products - whether food or fiber - are grown and processed. The word "organic" on the label stands for a commitment to a system of agriculture that strives for a balance with nature, using methods and materials that are of low impact to the environment. "Certified organic" means an independent organization verifies that the company meets or exceeds defined organic standards.

The federal rule defining "organic" was published December 21, 2000 by the U.S. Department of Agriculture. The rule prohibits the use of genetic engineering, irradiation or sewage sludge as well as toxic and persistent pesticides and synthetic fertilizers in organic agriculture and processing. The rule, in development over a decade, was fully implemented in October 2002. (USDA 2000)

Federal regulations are important because they standardize strict criteria for organic production that will facilitate domestic and international trade. In-depth information about USDA's National Organic Program and the new rule are available online at www.ams.usda.gov/nop. For an overview and useful business contacts, visit OTA's web site: www.ota.com.

Trends in Organic Cotton Production

Acreage and Yield of Organic Cotton Planted in the United States: 2001-2002

In 2002, Cotton Incorporated awarded OTA a grant to determine the number of acres in organic cotton production in the U.S.

To determine this acreage, OTA decided to interview all the organic cotton farmers in the U.S. OTA used its list of growers, obtained by contacting organic certifying organizations and agencies in the U.S. in past years. We then contacted all the now-accredited certifying organizations and agencies to get information on new growers. OTA developed a survey with a number of production and market questions, and, once contact information was developed, sent the survey by email, fax or mail. Follow-up was conducted as personal phone calls. In the case of Texas, OTA contacted both the Texas Department of Agriculture and the Texas Organic Cotton Marketing Cooperative (TOCMC), which represents 20 growers. All in all, in 2002, 10 individual farmers and the 20 members of the TOCMC had planted organic cotton.

OTA data show that in 2002, farmers in five states *planted* 9,044 acres of organic cotton. (See Table 1) These figures include acreage producing certified organic cotton and land that is in transition to certified organic production. Texas continued to lead the United States in organic cotton production with 6,872 acres, followed by New Mexico (589 acres), California (584 acres), Arizona (578 acres) and Missouri (421 acres). (See Table 2) This acreage represents a 22 percent decrease from the 11,586 acres of organic cotton planted in 2001.

There was a big change in the ranking of organic cotton producing states from 2001 to 2002. While Texas remained by far the largest producer in terms of planted acreage, New Mexico increased its acreage 21% to go from fourth to second place. New Mexico, California and Arizona all planted approximately the same numbers of acres of organic cotton, followed by Missouri. (See Table 3).

In terms of *yield* from 2001 production, there were approximately 9,897 bales (4,750,560 pounds) of organic cotton harvested from 11,316 acres for an average of 0.87 bales per acre. (See Table 4) Per state averages were often higher with individual farmers in both California and New Mexico experiencing yields from two to more than three bales per acre, most likely due to irrigation. Specifically (in alphabetical order): Arizona harvested 2,162 bales from 1,253 acres for an average of 1.7 bales per acre; California harvested 1,283 bales from 835 acres for an average of 1.1 bales per acre; Kansas had no harvested acreage; Missouri harvested 400 bales from 405 acres for an average of 1 bale per acre; New Mexico harvested 1,150 bales from 485 acres for an average of 2.7 bales per acre; Tennessee had no harvested acreage; and, Texas harvested 4,902 bales from 8,338 acres for an average of 0.6 bales per acre.

Respondents listed the following reasons for the decreased number of organic cotton acres planted in 2002 versus 2001: rented land in both California and Arizona was taken back by the owners, forcing discontinuation of organic cotton production on that land; Kansas lost its crop to rain; Tennessee lost its acreage to crop failure and Texas lost some acreage to organic crop rotation requirements and the rest to one farmer's decision to cut back on organic cotton acreage. Farmers in Tennessee and Kansas chose to grow other crops in 2002.

Which are the Primary Certifiers?

Under the new National Organic Program, all organic production must be certified by independent certification organizations accredited by the U.S. Department of Agriculture. A list of such accredited certifiers is maintained on the Web at www.ams.usda.gov/nop/CertifyingAgents/Accredited.html.

Twenty-two farmers (20 members of the Texas Organic Cotton Marketing Cooperative-TOCMC, plus two other farmers) were certified by the Texas Department of Agriculture. Three were certified by the Organic Crop Improvement Association (OCIA), two by Quality Assurance International (QAI), and two by California Certified Organic Farmers (CCOF). All four certifiers are accredited by USDA. One farmer took the option of only registering with the state as certification was not mandatory prior to October 2002.

Farmers' Organic Cotton Research Needs

In undertaking its organic cotton production survey, OTA also asked farmers and farmer associations what their primary agriculturally-related research needs are.

Overall, the respondents OTA interviewed noted research needs using methods and/or materials that meet federal organic farming standards. In particular, they consistently noted defoliation, insect and weed management, as well as soil fertility. Insect management research would focus on aphids, lygus, mites, boll weevil and pink bollworm problems.

By state, Arizona growers noted weed management and defoliation; Californians mentioned defoliation, weed management, lygus and mite control, and soil fertility; Missouri farmers discussed defoliation, weed management and thrips control; New Mexico growers cite weed management and pink bollworm; and Texans list defoliation, weed and bollworm management. (See Table 5)

What is Needed to Maintain Organic Cotton Production?

Virtually all farmers and farm associations interviewed noted that a more stable or an expanded market was key to their continued production of organic cotton. Their suggestions included a) increasing consumer education, b) advertising by both support organizations and companies using organic cotton, c) getting more large companies involved, and d) purchase of U.S.-grown organic cotton or forward contracts.

Markets for Organic Cotton

Based on OTA communication with leading apparel companies, interest in integrating organic cotton into product lines appears to be expanding, with apparel companies in the active and outdoor wear arena taking the greatest steps. Historically, the organic fiber industry has been the arena of entrepreneurs and other small businesses. These companies are continuing to offer a wide variety of products. (For list of OTA Fiber Council members, see Attachment A)

Which Large Companies are Using Organic Cotton?

2002 has been a banner year in terms of the number of large U.S. and Canadian companies expanding their use of organic cotton, adding organic cotton to their product lines, or making commitments to convert their use of conventional to organic cotton in the near future. For example (in alphabetical order):

- Cutter and Buck initiated its program to incorporate 10 – 15 percent organic cotton into two of its biggest styles of men's shirts and have a 50% blend organic/conventional blend in a third style. The company is considering expanding its current product lines with new options and styles.

- Early Winters converted its signature “Smith Rock” line to 100% organic cotton. In 2000, Norm Thompson Outfitters Inc., Early Winters’ parent company, announced that all divisions under its umbrella would convert their cotton apparel products to organic cotton by Spring ‘06.
- GAIAM launched its “Home” line of 100% organic sheets, pajamas and blankets, complementing its organic cotton yoga wear line in place since 2000.
- After a successful introduction of organic cotton long johns in Fall ‘02, Hanna Andersson is looking at ways to expand this offering over the next several years.
- Maggie's Organics/Clean Clothes, Inc. began servicing conventional grocery stores with its line of accessories made with organic fibers. They also formed a partnership with a screenprinter using only PVC-free, water-based inks, and began a container program for tee shirts, all made with domestic organically grown cotton.
- Mountain Equipment Coop (MEC) in Canada converted its childrenswear line to organic cotton, making its entire MEC-labeled clothing line 100% organic cotton.
- Nike released its new 100% organic cotton women’s “Nike Organics” line in Fall ‘02, complementing its program to blend 5 percent organic cotton with conventional cotton program.
- The Timberland Company initiated a plan to integrate organic cotton into their apparel line. From Spring '03 to Spring '06, the company plans to offer both 100% and blended products to consumers. The company currently uses 100% organic cotton for its promotional T-Shirts.

In addition, an increasing number of manufacturers are using organic cotton to make home products such as sheets, bedding and towels. This increase is indicated by an increased membership in OTA’s Fiber Council by such companies, and an increased number of products recently released onto the market from that sector.

Many of the above companies, as well as several other manufacturers and retail companies, attended a training session on integrating organic cotton into product lines offered by OTA in May 2002 at its All Things Organic™ Conference and Trade Show, and have met since then to explore in detail the steps needed to make the conversion more efficiently and rapidly. Many will be attending the All Things Organic™ event May 14-17, 2003 in Austin, Texas.

Development of North American Organic Fiber Processing Standards

To address which materials can be used in processing and finishing organic fiber, and how to label the finished products, OTA intends to complete processing standards in 2003. The standards would prohibit the use of environmentally hazardous processing agents, but permit the use of a limited subset of dyes that meet strict environmental standards. They also create different labels for finished products based on the percentage of organic content (e.g., 100 percent, 95 percent or more, 70-95 percent, or less than 70 percent).

OTA intends to have the organic fiber processing standards finalized by Fall 2003. At that time, OTA plans to provide them to USDA to use as the basis of federal organic fiber processing standards.

Most recently, USDA has announced a policy clarifying its jurisdiction over any products making an “organic” claim. (USDA 2002) The agency is in the process of developing an as-yet unspecified timeline after October 21, 2002 to visit the issues of organic fiber processing.

In the meantime, the only post-harvest provisions included in the national organic standards state that “goods that utilize organic fibers in their manufacture may only be labeled as a ‘made with...’ product; e.g., a cotton shirt labeled ‘made with organic cotton.’” (USDA 2000) The Federal Trade Commission has stated that listing the percent of organic cotton content on the garment label is allowed.

Conclusion

While U.S. organic cotton production has decreased, the Organic Trade Association is encouraged by the increased interest in organic cotton from several major companies and the continued production, and in some cases, expansion, of organic fiber product lines from myriad smaller companies.

References

Organic Trade Association. 2002. North American Draft Organic Fiber Standards: Post Harvest Processing, Record Keeping, and Labeling.

United States Department of Agriculture. December 21, 2000. Federal Register Vol. 65, No. 246 “National Organic Program; Final Rule. Page 80548. Web site: www.ams.usda.gov/nop.

Table 1. Estimates of United States Acreage Planted with Organic Cotton: 1990-2002.

Year	Acres
1990	900
1991	3,290
1992	6,305
1993	12,402
1994	15,856
1995	24,625
1996	10,778
1997	9,050
1998	9,368
1999	16,785
2000	13,926
2001	11,586
2002	9,044

Table 2. U.S. Acreage Planted with Organic Cotton by State: 2002.

(in descending order by acreage) ***

State	Acres
Texas	6,872
New Mexico	589
California	584
Arizona	578
Missouri	421
TOTAL	9,044

Table 3. Percent Change in U.S. acreage planted in organic cotton: from 2001 to 2002.

(in alphabetical order by state name)

State	Percent Change
Arizona	- 54
California	- 34
Kansas	- 100
Missouri	+ 1
New Mexico	+ 21
Tennessee	- 100
Texas	- 19
Average	- 22

Table 4: U.S. Organic Cotton Production by State: 2001

State	Planted Acres	Harvested Acres	Total Bales	Bales per Acre*
Arizona	1,253	1,253	2,162	1.7
California	885	835	1,283	1.1
Kansas	70	0	0	0
Missouri	405	405	400	1.0
New Mexico	485	485	1,150	2.7
Tennessee	50	0	0	0
Texas	8,438	8,338	4,902	0.6
TOTAL	11,586	11,316	9,897	0.87

(*480-pound bales)

Table 5. Organic Cotton Agricultural Research Needs by State: 2002

State	Research needs (in alphabetical order)
Arizona	Defoliation, weed management
California	Defoliation, weed management, required use of untreated seeds, lygus/mites management
Missouri	Defoliation, weed management, thrips management
New Mexico	Weed management, boll weevil management
Texas	Defoliation, pink bollworm, weed management

Attachment A

Organic Trade Association's Fiber Council Members (as of January 1, 2003)

Access Eco; Alvarez Farms; AMTEC; Apostol, Corporation; Athena Mills; Birdland Ranch EcoFashions™; Blue Canoe; Bo Weevil BV; Boxi Pillows; Caprock Ag. Products; Certified Organic Products; Chic Eco; coolnotcruel.com; Cornaggia Farms; Cotton Plus, Inc.; Cottonfield, LLC; Crown City Mattress; Custom Bedding of America; Cutter & Buck; Danish Import Family Wear; Day Spa Association; The Designer Textiles International Ltd.; Deva Lifewear, Inc.; Donaldson & McMahon Family Farms; Dream Pillows; Earth Friendly Goods; Earthlings, Inc.; Ecobaby Organics, Inc.; Eco-Bags Products Inc.; Ecosmed, Inc.; Ecosport, Inc.; EcoTrade; Enviro-Tote, Inc.; Feeling Goods; Furniture, Inc.; GAIAM/Harmony Catalog; Garden Kids; Glad Rags/Keepers! Inc.; Glen Marecek; Good Groceries Company, Inc.; Good Humans; Green Hotels Association; Green Island; Green Mountain Spinnery; Green Textile Associates, Inc.; Greenland Marketing Consultants, Inc.; Greensource; H3Environmental, Corp.; Hankettes Organic Cotton Cloth; Hanna Andersson, Inc.; Heart of Vermont; Hemp Industries Association;

Herbal Animals, Inc.; Himalayan Eco Trade LTD; Holy Organic!; Horizon Organic; Hugg-A-Planet; Indiana Certified Organic, Inc. (ICO); Indigenous Designs; Indika; James Wedel Farms; Janice Corporation; Japan Organic Cotton Association (JOCA); Just Living; Klickitat Organics, LLC; Knauer Group; Kumba; Lands Downunder International, Ltd.; LaRocca Vineyards; Liberty Graphics; Lifekind Products, Inc.; Little Merry Fellows; Lynda Grose, Inc. M & M Hilmont International, Inc.; Maggie's Organics/Clean Clothes, Inc.; Mama's Earth The Environmental General Store; McKaskle Organics, Inc. Mountain Equipment Co-op; Nagyar Group Inc.; Natracare LLC; Natural Origins; NatureUSA; New Mexico Organic Commodity Commission (NMOCC); Nike, Inc.; Norm Thompson Outfitters; Nutiva; Organic Cotton Alternatives; Organic Essentials, Inc.; Organic Fiber Source; Organic Solution Co.;

Organic Threads; Organic Weddings, Inc.; Organics for Massage; OrganicWorks Marketing, LLC; Original Earth Friendly Goods, The; Osaj Intimates; OTA's Organic Fiber Council; Panoco Trading CO LTD Japan; Parkdale Mills, Inc.; Patagonia, Inc.; Paul Reinhart, Inc.; Pepper Farms; Peru Naturtex Partners; Pesticide Action Network-North America (PANNA); PJs Sleep Company; Poppy Singer Linens; Q Collection; Quality Assurance International, Inc. (QAI); Rincon-Vitova Insectaries, Inc.; S & E Organic Farms, Inc.;

Sage Creek Naturals; Save A Tree; SEKEM Group; Sew Eco-Logical; Sheppard, Mullin, Richter & Hampton L.L.P.; Sleeptek Limited; Southwestern Irrigated Cotton Growers Assoc. (SWIG Cotton);

Specialty Fabrics; Spiral Clothing of America, Ltd.; Spring Creek Ranch; Stepping Stones; Susan Carskadon; Sustainable Strategies; Sustainable Systems Design; T.S. Designs, Inc., Terra Verde Trading Corporation; Territory Ahead, The; Tevitom; Texas Department of Agriculture (TDA); Texas Organic Cotton Marketing Cooperative (TOCMC); Thirteen Mile Lamb & Wool Co.; Tierra Wools; Tights On Line Inc.; Timberland Co., The; TRC & Associates, Inc.; Trees of Royalty Inc.; Trout Lake Farm LLC; Under the Canopy; Under the Nile; Vedalia Ventures; Vermont Organic Fiber Co.; Verner Frang AB; Village Botanica, The; Vreseis Limited; White Lotus Home; Why Knot Organic Knits; Wildlife Works Inc.;

Woolmark Company, The; Wright's Handicrafts; Xanomi, for our children.