From Farm to Fabric: The Sustainable Power of 100% Plant-Based Dyes



Natural indigo dyes enrich farm ecosystems, combat climate change, and empower people with safer, cleaner color.

"People don't always know why they should be worried about synthetic indigo," explained Sarah Bellos, founder and CEO of Stony Creek Colors, maker of natural indigo dyes. Synthetic indigo is derived from harmful chemicals, like benzene, formaldehyde, and sodium cyanide, with 100% of this textile chemical produced in China. According to the Nature Conservancy, the U.S. loses 10 billion tons of fertile soil annually due to poor soil management practices, with global crop losses estimated at \$173 billion due to nematodes. These dangerous nematodes feed on plant roots, ultimately damaging the plant and severely impacting its growth, which threatens farmers' livelihoods, lowers crop yields, and worsens negative environmental impacts. Stony Creek Colors has a solution for reducing the use of harmful chemicals in denim dyeing, while delivering a profitable rotation crop to growers.

Stony Creek Colors solution is to create natural dyes using Indigofera varieties, legumes which capture atmospheric nitrogen and carbon and naturally suppress nematodes. These features enrich the soil for future crops following in the farming rotation, providing long-term agricultural stability and good financial return for growers. The company's indigo plants are grown in partnership with U.S. family farms as a profitable cash cover crop that reduces soil pest levels. Natural indigo production under the Stony Creek Colors process uses only indigo crop biomass, water, and simple pH modifiers.

Until the introduction of synthetic indigo roughly 120 years ago, natural indigo had an established history in textiles and its traditional production methods went largely unchallenged. Yet today, Ms. Bellos finds herself educating potential partners and customers on the benefits of plant-based alternatives and how to recognize the real thing. Helping her make the case has been the fact that in 2018, Stony Creek Colors became the first indigo manufacturer to become USDA Certified Biobased at 100%—meaning that all the ingredients in Stony Creek Colors dyes are made from renewable materials.

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"There's a lot of weight that comes from the certification. The label is meaningful because it promotes transparency and its authority gives us added credibility," she said. "I've been in many meetings where people have asked about the certification."

"But they also often ask, 'Why should we pay more? Can something that's biobased really be as good as synthetic?' I explain that given our process of harvesting, rotating crops, and extracting, we can guarantee the specificity and purity that big brands are used to. We also present the facts. We let them know we can replace this blue with this blue and nothing's going to change," she said.

Read the full case study here.

We Want to Showcase Your Products!



The BioPreferred Program maintains a collection of biobased product samples. We often display these samples at our booth when team members attend trade shows and conferences. We also photograph samples for use in our social media posts, training, videos, and BioBuzz and BioBuzzGov newsletters. Samples enable us to demonstrate the wide range of biobased products available in the market.

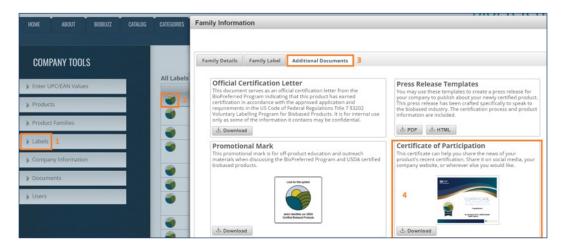
Want to have your samples included in our collection? Send your samples to:
The USDA BioPreferred Program
1400 Independence Avenue, SW
Washington DC 20250

Have You Downloaded Your Certificate of Participation?

We recently added a Certificate of Participation to Company Tools. This certificate can help you share the news of your product's recent certification. Share it on social media, your company website, or wherever else you would like to share.

To download your certificate, log into Company Tools, then follow these steps:

- 1. Click Labels from the sidebar menu.
- 2. Select your certified product from the labels listing.
- 3. Click the Additional Documents tab.
- 4. Download your Certificate of Participation.



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HR 5134 Introduced in the House

Legislation Intended to Strengthen American Biomanufacturing and the USDA BioPreferred Program



On August 4, <u>HR 5134</u> was introduced in the House and referred to the Committee on Agriculture. Originally introduced as the Biomanufacturing and Jobs Act by U.S. Senators Amy Klobuchar (D-MN), Joni Ernst (R-IA), Debbie Stabenow (D-MI), and Pete Ricketts (R-NE), this legislation is intended to strengthen the USDA BioPreferred Program.

Biomanufacturing is crucial for developing new commodity markets, driving economic growth, and creating jobs," Klobuchar explained in July, when the Biomanufacturing and Jobs Act debuted. "I'm proud to lead this bipartisan effort to support our farmers while reducing our dependence on fossil fuels with Senator Ernst, Senator Ricketts, and Senator Stabenow, who has been a longtime champion for the BioPreferred Program."

The introduction of the Biomanufacturing and Jobs Act is a huge step forward for those in the bioeconomy, given the BioPreferred Program is the Federal Government's official advocate and market accelerator for biobased products and the leader in creating a more circular economy through greater adoption of renewable biobased materials.

Specifically, this legislation would:

- 1. Strengthen markets for farmers while also supporting good-paying manufacturing jobs.
- 2. Allow the Secretary of Agriculture to set acceptable price premiums under the program.
- Require each federal agency to increase their procurement of biobased-only contracts or biobased volume purchased under those contracts.
- 4. Improve reporting of biobased products that are purchased through online federal procurement systems.

This legislation is endorsed by Agriculture Energy Coalition, American Farm Bureau Federation, American Soybean Association, Clean Fuels Alliance America, Corn Refiners Association, National Association of State Departments of Agriculture, National Corn Growers Association, National Farmers Union, National Industrial Hemp Council of America, National Hemp Association, Plant Based Product Council and Renewable Fuels Association.

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Prevent Sediment from Slip-Sliding Away with Biobased Erosion Control Products



Many organizations have initiatives to improve the water quality of their local area and minimize the introduction of sediment into rivers and waterways by reducing runoff at corporate facilities, buildings and headquarters. Yet synthetic erosion control products often do more harm than good. Fortunately, over 50 different types of biobased erosion control products have received the USDA Certified Biobased Product Label. So, if you or your colleagues are tasked with eliminating runoff at corporate campuses or facilities, there are many biobased options to meet your needs.

Erosion control is the practice of preventing or controlling <u>erosion</u> in <u>agriculture</u>, <u>land</u> <u>development</u>, <u>coastal areas</u>, <u>river banks</u> and <u>construction</u>. Effective erosion controls handle <u>surface runoff</u> and are important techniques in preventing <u>water pollution</u>, <u>soil loss</u>, wildlife <u>habitat loss</u> and human <u>property</u> loss.

Biobased erosion control products—made from materials such as straw, wood fiber and coconut—include blankets, mats, tubular socks, and fabrics used to protect topsoil from erosion on slopes and embankments. Products range from temporary and degradable to more permanent solutions.

According to <u>USDA's Erosion Control and Treatment Guide</u>, the proper product depends partially on the type of erosion, which may include water, gully, channel, coastal, gravity, wind, ice and chemical origins. Environmental factors, like soil type and the grade of the treatment area, also play a role. Regardless of what you see slip-sliding away, you can find biobased products to solve the problem!

DID YOU KNOW?

We Offer Custom Training



Ever wonder how to sell biobased products to the Federal Government? Or, how to comply with the biobased related Federal Acquisition Requirements (FAR) outlined in a government solicitation? Or, how to identify federal contractors who may need a biobased product supplier? The BioPreferred® Program offers a variety of training programs, which we can easily tailor to your organization or association. If you would like to request training, please email help@usdabiopreferred.net or call (202) 643-3287.

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GSA is hosting a

webinar on its Verified

Products Portal (VPP)

Tuesday, October 24

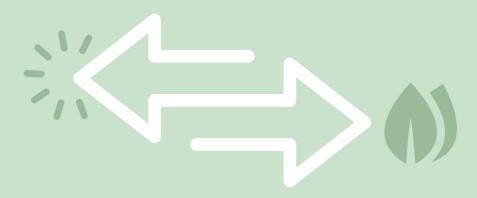
and reserve your spot

on how to register

coming soon!

at 1:00 ET. Information





Did You Commit to Switch?

Show us your commitment! If you're switching from petroleum-based products to biobased alternatives at work or at home, you are in good company! On Twitter, use the hashtag #CommitToSwitch, tag us or browse the hashtag to see how others are making the switch. Every switch matters!

Join GSA's Verified Products Portal

GSA's Verified Products Portal (VPP) is a manufacturer-facing portal for product details and supplier authorization content. Through the VPP, original equipment manufacturers (OEMs) can:

- Control product details and marketing content.
- Authorize and deauthorize products and resellers to protect against supply chain risks and ensure product and vendor authenticity.
- Eliminate variability among identical products through standardized names and part numbers.
- Improve the customer experience through additional details and materials such as product specifications (images, product videos, PDFs, etc.).
- Control who can sell products and what product lines they can sell (reduces the burden on vendors to provide letters of supply and product specifications).

The VPP enables authorized OEMs and their wholesalers to fulfill the Letter of Supply requirement by providing supplier authorization information and detailed product content.



If you are an OEM, the VPP is completely voluntary and free to use and will improve the representation of your commercial off-the-shelf (COTS) products. Its data will ensure products are accurately represented in GSA ecommerce platforms such as GSA Advantage!

Want to stay up to date on what's happening in the bioeconomy and with our Program?



Click <u>here</u> to subscribe to BioBuzz and BioBuzzGov. And share with a friend!