

Hemp TODAY

Voice of the Global Hemp Industries



Euro Hemp Leaders



WOLF JORDAN
Builder with Soul

What U.S. hemp needs from Europe
Estonia, Poland & Ukraine advance
Marking Hempro Int.'s first 15 years
MC HC 3400 harvester: Flexibility in the field
Table set in Australia, New Zealand
Indicators on the CBD roadmap ahead

CORPORATE SPONSORS:



"The most concentrated and advanced program I've ever been to in the hemp space."

– Richard Rose, The Hemp Nut Consultancy, Italy/USA

HEMP 2020 Business Summit

For Key Managers • Entrepreneurs • Investors
• Local Administrators • Municipal Authorities
• NGOs • Environmentalists • Policy Makers
• Researchers

Oct. 20-21, 2017 • HempToday Center • The Palace at Nakło, Lelów, Poland • hemptoday.net/2020

SPEAKERS
CONFIRMED
TO DATE:



Boaz Wachtel
Creso Pharma
Australia



Michel Tereschenko
Mayor, City of
Hlukhiv, Ukraine



Hana Gabrielova
Hempoint
Czech Republic



Piotr Jastrebski
Podlaskie Konopie
Poland



Morris Beegle
CoHempCo
NoCo Hemp Expo
USA



Preston Whitfield
Source Hemp
Functional Remedies
USA



Rick Trojan
Hemp Road Trip
USA

The "HEMP 2020 Business Summit 2017" is an opportunity for current and future industry stakeholders to get up close and personal as we survey the vast opportunities in hemp worldwide.

Register Now!
Only 25 accreditations available.

The aims of the Summit are to share knowledge and experiences, to foster business matchmaking among participants, to generate a body of content for broader distribution around the world, and to jointly explore the potential for hemp products as an engine for sustainable economic development.

Venue



The Naklo Foundation

HempToday Center
The Palace at Nakło,
Lelów, Poland
naklopalace.org
+48 602 336 685

hemptoday.net/2020

What past attendees say about **Hemp2020**:

"Excellent talks. Unbelievable depth."

Rafael Dulon, HANF FARM GmbH Germany

"A key event to advance the goals of a stronger industry worldwide."

Haile Selassie Tefari, Hemp Service International, France

"A rare opportunity in a graciously accommodating setting."

Pamela S. Bosch, Highland Hemp House, USA

"Most important event for my international networking."

Henry Wieker, Founder & Inventor, Henry's Hemp Harvester, Germany

"A game changer for us. By the end, our dream project got a donor!"

Nivedita Bansal Shah, Shah Hemp Inno-Ventures, Nepal

Presented by:

Hemp TODAY HempConsult

HEMPTRADE

HEMPINT

ELIXINOL

STRONGER TOGETHER

YOU CAN TRUST

ELIXINOL CBD HEMP OIL

HOW WE SUPPORT YOU

- ✓ Highest quality raw materials available
- ✓ Superior product formulations
- ✓ Highly competitive pricing
- ✓ World class customer support
- ✓ Marketing materials and support
- ✓ Training on how to engage your customers & optimize your profits



WWW.ELIXINOL.COM/PARTNER



Board of Directors



Daniela Sfrija
Canah Int. s.r.o
Romania

Boris Banas
CBDepot
Czech Republic

Mark Reinders
EIHA President
HempFlax B.V.
Holland

Daniel Kruse
Hempro Int.
GmbH
Germany

Olivier Joreau
C.A.V.A.C
Biomatériaux
France

Bernd Frank
EIHA Treasurer
BaFa Neu GmbH
Germany

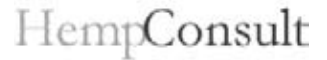
Sylvestre Bertucelli
InterChanvre
France



c/o nova-Institut GmbH
Chemiepark Knapsack
Gebäude 0611
Industriestraße 300
50354 Huerth, Germany

Tel. +49-(0)2233-48 14 40 (office)
Fax +49-(0)2233-48 14 50
email: dominik.vogt@eiha.org
www.eiha.org

Corporate sponsors of the 2017 HempToday/EIHA special edition:

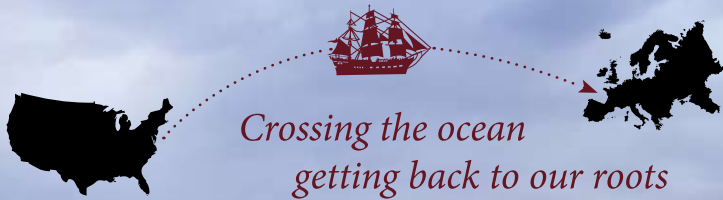


Hemp Road Trip

Coming to Europe...

SEPT/OCT
2017

Catch us October 20-21 @
Hemp 2020 Business Summit
OTHER DATES ONLINE



HEMPROADTRIP.COM



+1 720.460.1281





© NPSP Composites, Hempro, Hemcore

Join EIHA to support the Hemp Industry

- All your questions about Hemp business are passed on to all **EIHA** members
- Instant access to more than 400 presentations, studies and statistical data
- You will be part of a network of important international Hemp experts:

More than 130 companies, associations, institutes and individuals already support **EIHA**

- Opportunity to support the networking, lobbying and publishing of information on Hemp by **EIHA**
- You will be supporting the environmentally conscious Hemp Industry

EIHA is involved in all areas of the Hemp Industry, including:

- Hemp Fibres
- Hemp Food Supplements
- Hemp Shivs
- Hemp Oil
- Hemp Seeds
- Hemp Cannabinoids

The European Industrial Hemp Association (EIHA)

EIHA was originally founded as an association of the members of the European hemp industry. Regular members include primary hemp processors in the EU. Associate members may be associations, research organisations and companies as well as individuals working in the area of hemp and other natural fibres. Founded in 2005, EIHA today has 22 regular members and 115 associate members from 37 countries.

EIHA was founded to give industry a voice at the European Commission in Brussels. It has rapidly become a respected industry association that provides effective lobbying and serves as an information bank. The annual EIHA conference has become an attractive opportunity for members and visitors to meet, learn about developments and exchange views with their colleagues.

Join EIHA and support the Hemp Industry.

Regular membership is restricted to those legal entities or companies, which perform the processing of hemp straw to produce fibres and hurds/shivs or hemp raw material such as fibres, hurds/shivs, seeds or flowers.

Each regular member has 10 votes plus 1 additional vote for every 1,000 ha of area under hemp cultivation contracted by its processing plant(s) in the current year. Regular members must provide, to the Executive Director of EIHA, data on their cultivation and processing of hemp and on the use of their material by product line by, at the latest, 1 April of the following year. Regular members are also member of several special interest groups (CBD, Fibres, Food, Shivs, THC). The annual membership fee for regular members is 165 € per vote.

Associated membership: Any person or institution may become an associate member. Associate members may attend the annual EIHA meetings, having the right to speak, to make proposals and to vote. Each associate member has 1 vote. The annual membership fee for associate members is 330 € (or a larger voluntary contribution). Please check with statute and minutes of EIHA.

For more information please contact:

Dominik Vogt
+49 (0)2233 48 14-40
dominik.vogt@eih.org

or visit www.eiha.org



Kehrt Reyher
Editor & Publisher

Senior Advisers

Steve Allin
International Hemp
Building Association

Richard Rose
The Hemp Nut Consultancy
Italy & USA

Hana Gabrielová
Hempoint
Czech Republic

Daniel Kruse
HempConsult GmbH
Germany

Morris Beegle
Colorado Hemp Co.
Colorado, USA

Global Advisers

EUROPE

Rafael Dulong
Hanf Farm GmbH
Germany

Rachele Invernizzi
SouthHemp, Italy

Rafał Modliński
HempMedicals, Poland

Sergiy Kovalenkov
Hempire, Ukraine

Boris Bañas
CBDepot, Czech Republic

Monica Brümmer
Cannabric, Spain

Pierre Amadieu
Initiative Chanvre, France

AFRICA

Tony Budden
Hemporium, South Africa

Arne Verhoef
Hemp Hub, South Africa

NORTH AMERICA

John Patterson
Tiny Hemp Houses
Colorado, USA

Pamela Bosch
Highland Hemp House
Washington, USA

Gunhee Park
Ministry of Hemp
Texas, USA

ASIA

Dhiraj K. Shah
Shah Hemp Inno-Ventures
Nepal

Riki Hiroi
Each Japan, Inc.
Japan

BOHECO
The Bombay Hemp Co.
India

Media Advisers

Allan Lengel
Ticklethewire.com
Washington D.C., USA

Tom Sakell
Harbor Sights
Washington D.C., USA

Karen Stevenson
Witness.org
New York, USA

John Beauchamp
Home Grown Media
Poland

HempToday web and print design by:



Marshall Reyher • www.mprstudio.com

Publisher



The Naklo Foundation

Naklo 74, Lelów • 42-235 Poland
+48 602 336 685 • info@hemptoday.net

Copyright © 2017
The Naklo Foundation

All rights reserved. No part of this publication may be reproduced, distributed, or transmitted in any form or by any means, including photocopying, recording, or other electronic or mechanical methods, without the prior written permission of the publisher, except in the case of brief quotations embodied in critical reviews and certain other noncommercial uses permitted by copyright law. For permission requests, contact to the publisher at the address below.

In This Issue

Special Edition: 14th Annual EIHA International Conference

COVER STORY



Euro Hemp Leaders

Entrepreneurs, scientists, farmers, builders, missionaries. HempToday presents 15 Euro Hemp Leaders who've dedicated their careers to the industry's advance guard.

8

What the European industry can do for U.S. hemp 12

Central Europe gets serious

- Estonia:** Small but moving fast..... 14
- Poland:** Youngbloods fuel hemp 15
- Ukraine:** Need for machines, money ... 16

Now on hemptoday.net

Interview with
EIHA President
Mark Reinders



COVER ILLUSTRATION: MPR STUDIO

MILESTONES

Marking Hempro Int.'s first 15 years – 20

Rebecca Kruse: My decade in hemp – 22



CBD

Indicators on the roadmap ahead – 24

TECHNOLOGY

MC HC 3400 harvester: Flexibility in the field – 32



MARKETS

Table set in Australia, New Zealand – 34

FEATURES

- CBD market:** Beyond the Hype: What to look for in CBD..... 26
- CBDepot's special mix: Tracked, tested, trusted 28
- Intelligence:** HempConsult: Pushing hemp's potential globally..... 30
- Elixinol: Setting the bar high in Europe..... 36



VOICES

- Haile Selassé Tefari:** Of markets and miracles 18
- WolfJordan:** A natural builder with soul..... 37

CONNECTING THE WORLD OF HEMP

organic growing



hemp product development



seeds multiplication



research and consulting



networking



Hempoint, s.r.o.
Brtnická 10B
586 01 Jihlava – Sázav, Czech Republic

web: www.hempoint.cz
mobile: +420 777 027 012
e-mail: office@hempoint.cz





Euro Hemp Leaders

They're farmers, builders, scientists, makers of hemp health aids and beauty products, sellers of foods and fashions, entrepreneurs and missionaries who've spent a decade or more in the European hemp industry's advance guard.

As HempToday.net launches a new online feature, "Who's Who in Hemp" – a growing collection of industry profiles from all over the world – here is a look at 15 pioneers who have shaped European hemp since the turn of the century.

For more profiles and information on global hemp industry leaders: hemptoday.net



Steve Allin

IHBA/Ireland

Steve founded the International Hemp Building Association (IHBA), which he serves as director. An author, teacher and consultant on ecological building, Steve has been building with hemp and promoting hemp's use in construction all over the world for the last 20 years. He is currently involved in projects to rebuild with hemp in the post-earthquake areas of Haiti and Nepal, while maintaining a busy workshop and speaking schedule. Steve is the author of "Building with Hemp" (2005), considered to be the definitive book on hemp-based construction.



Boris Baňas

CBDepot/Czech Republic

A hemp activist since 1998, Boris, who serves as CSO at CBDepot, started growing hemp for research under Slovak government licenses in 1999, and ultimately helped to push the Slovak government to adopt EU hemp-related farming rules in 2008. He launched CBDepot in 2014 with a mission to provide legal, high quality cannabidiol-enriched products for the industrial and consumer markets. He is also co-founder and co-owner of Hemp Seed Oil Europe, Ltd, a supplier of bulk and private label hemp seed derivatives. Boris is a graduate of the School of Finance, Matej Bel University, Slovakia.



Monika Brümmer

Cannabric/Spain

Monika Brümmer is an architect specialising in hemp building, ecological and bioclimatic buildings, historic restoration and rehabilitation of traditional cave dwellings. She is the inventor of Cannabric, pre-fabricated hemp-based building blocks which have been manufactured at her facility in Granada since 1999. A globally recognised consultant in hemp and other eco construction, she is also a partner on an initiative to improve living conditions in Morocco's High Central Rif that aims to capitalize on the economic potential of the region's cannabis straw to retrofit older structures and for new builds made from hempcrete.



Jace Callaway Anita Hemmilä

Finola Ltd./Finland

The FINOLA hemp variety began in Finland with Jace Callaway and Anita Hemmilä in 1995. Their company, Finola Ltd. provides certified planting seed to hempseed growers. FINOLA was the first oilseed variety to be developed for grain production in Europe and North America. Jace, an American scientist, CEO and Adjunct Professor at the University of Eastern Finland, has more than 80 scientific publications on food and drug research. Anita is a Finnish linguist, CFO and doctoral candidate at the University of Jyväskylä in Finland. They have worked together since 1983.



Rafael Dulou

Hanf Farm/Germany

Rafael, Hanf Farm's CEO, has been involved in nearly all aspects of the hemp value chain since 1997. Trained in organic agriculture and marketing of high-quality hemp foods, he began with the cultivation of cannabis seeds in Saxony-Anhalt and Brandenburg, Germany as early as 1997, processing hemp seed into top-shelf edible oils. He is also the developer of the Multi-Combine HC 3400 hemp harvester, a major technological step forward that can help hemp farmers realize the full promise of the plant on a massive scale.



Albert Dun

Dun Agro/Holland

Albert, Dun Agro's founder, started breeding fiber hemp in 1994, and quickly became one of the most prominent figures in Holland's hemp industry through Dun Agro, which along with providing fiber to the automotive industry makes animal feed supplements, shivs for construction and processes leaves for food products. Having worked independently on hemp technology since 2000, Albert between 2003 and 2008 developed a revolutionary small scale production system which Dun Agro continues to refine. After developing a first hemp mower in 1995, the company in 2012 introduced a dual-purpose harvester that harvests both leaves and stalks.



Hana Gabrielová

Hempoint, Czech Republic

Hana is founder and CEO at Hempoint, a vertically integrated organic hemp farmer and food maker. She also serves the International Cannabis and Cannabinoids Institute (ICCI) on matters related to Patient Focused Certification (PFC) standards for cannabis. Hana is accredited by the Czech Ministry of Agriculture as an adviser in organic farming with a specialization in hemp. She graduated from the Faculty of Agriculture, University of South Bohemia in 1999 where she wrote her thesis on cultivation and use of hemp in the Czech Republic.



Robert Hertel

HempAge/Germany

After introducing a few hemp textile products to the product line of his existing startup, Color Connection (1991), Robert turned exclusively to hemp textile goods in 1996. In 1999 Color Connection merged with the firm Hanfzeit to form HempAge AG. Hertel received a patent in 2001 for an application in composite fabrics with stretched hemp fibers. In 2012 he founded Bast & Faser GmbH, an R&D firm focused on technologies for the production of fiber material from renewable raw materials. He has been a director of the Romanian hemp and linen union since 2004.



Rachele Iwernizzi

South Hemp/Italy

Rachele is president at privately-held SouthHemp Tecno srl, a processor located in Crispiano Taranto in southern Italy, where she guided the development of a decortication plant that went on line in 2015, and where South Hemp incubates new hemp businesses. She is a member and agricultural coordinator for south Italy at Assocanapa, Italy's national association supporting the reintroduction of hemp cultivation and the use of hemp raw material for major industries. Through SouthHemp, she is also a Founding partner of Feder-canapa, a federation which backs hemp initiatives throughout Italy's regions.

15 EURO HEMP LEADERS



Bernd Frank

BaFa Neu GmbH/Germany

Managing Director of BaFa neu GmbH, Bernd got into the hemp industry after the re-legalization of hemp farming in Germany in 1996. BaFa, which mainly processes regionally grown hemp for fiber, also is active in R&D of products made from hemp fiber and shivs. In 2000 the company worked with German firms Götz and Deutz-Fahr as well as the State Institute for Crop Production on the development of a dual crop harvester, first deployed in 2001. The company also contributed to the development and approval of the Thermo-Hanf-Mat, the first building-approved hemp insulation material in Germany.



Daniel Kruse

Hempro Int. GmbH & Co, KG; HempConsult GmbH Germany

Founder of both Hempro Int. and HempConsult, Daniel has been in the hemp industry since 1995. Hempro Int. is a vertically integrated Dusseldorf-based producer and wholesaler of hemp foods, bulk raw materials for food, textiles, accessories and cosmetics. Daniel is a senior advisor to entrepreneurs, startups, investors and other industry stakeholders through HempConsult GmbH, an independent consulting firm. He has a background in banking and studied in the USA and Germany.



Ezekiel Lagier-Battini

Canamose France

Ezekiel Lagier-Battini knows hemp from an early age. The son of the late French hemp building legend Yves Khün, Ezekiel has built on the legacy of his father by succeeding him at Canamose, the French natural building supply and construction company that is credited with developing a movable shuttering system commonly used nowadays in hempcrete wall applications. Ezekiel has built thousands of houses throughout France, always marking his projects with a hemp leaf in the wall.



Stefan Nölker-Wunderwald

Hanf Zeit/Germany

Stefan Nölker-Wunderwald is the founder and CEO of Hanf Zeit, a vertically integrated hemp producer and seller based in Steinheim, Germany. Started in 1997, Nölker-Wunderwald's firm was involved at the very beginning of Europe's hemp revival, in R&D, production and marketing. Nölker-Wunderwald, who first harvested hemp in 1999, has been active in hemp awareness in Germany including lobbying the German federal government on behalf of hemp industry issues. Among innovations developed by the company, its anti-stress and fragrance pillow was chosen as Hemp Product of the Year at Cannabusiness 2001.



Mark Reinders

HempFlax/Holland

Mark, CEO at HempFlax, was raised on a family farm where he first encountered hemp when his father began planting it as an experiment in the 1990s. He first joined HempFlax as an intern in 2002. After gaining experience in the agriculture and recycling industries he later returned to HempFlax as Vice President, and in 2015 was named CEO of the entire group, which has operations in Holland and Romania. Reinders, who studied in Holland at Nyenrode Business University and Van Hall Instituut, was last year elected as only the second president in the history of the EIHA.



Michalis Theodoropoulos

Kannabio/Greece

A cannabis activist since 2004, Michalis led the establishment in 2016 of KAN-NABIO, a Greek organic hemp cooperative which he now serves as president of the executive board. The startup launched immediately upon hemp production becoming legal in Greece (April, 2016) as a 15 member cooperative that will grow and process 10 hectares of organic hemp with 9 farmers in 2017. An environmental policy adviser by profession, Michalis has lobbied for cannabis law reform nationally and internationally for more than 12 years, on behalf of iliosporoi network, and as a member of ENCOD.

5 Reasons to join HempToday.

Get your membership, and catch up with the hemp revolution!

1. PREMIUM CONTENT

Keep up with the hemp revolution through hard-hitting original content generated by HempToday journalists from a reliable global network of industry sources.

News!

Get news, analysis, and information on policy and politics, the latest research and knowhow; the companies and, most importantly, the people — the scientists, entrepreneurs and innovators who are leading the hemp revolution.

And More!

Analysis & Commentary
Country & region reports
Company profiles
Executive profiles
Facts & figures
Investment opportunities
In-depth interviews

Hemp TODAY

The screenshot shows the HempToday website interface. At the top, there's a 'News' section with a featured article about Gabbard addressing a Hawaii hemp conference. Below this are several smaller news snippets with images and titles. To the right, there's an 'EVENTS' section listing various hemp-related events. At the bottom, there's an 'Interactive PDF Download' section for a 'Hemp Yearbook' with a price of €50/536. The website has a clean, professional layout with a mix of text and images.

2. HT CONNECT

As a part of your membership, you're automatically a member of HempToday Connect, our constantly expanding Business Directory of qualified hemp companies the world over.

Hemp TODAY CONNECT



Shah Hemp Inno-Ventures

Categories: Advocacy, Retail, Wholesale, Textiles
Description: SHIV makes fashion accessories from hemp textile, and produces a range of hemp massage and therapeutic oils. The company is also involved in a project that is building build homes in Nepal both for victims of the 2015 earthquake and for the less fortunate who've never had homes.

Website: <http://shivhomesnp.weebly.com>

More about this company:

20.02.2017 – Homebuilding project turns to Indiegogo
15.02.2017 – Nepalese, French firms in 'Hemp Boutique'
07.12.2016 – SHIV nears completion of a hemp home
11.11.2016 – German firms aid in post-quake Nepal
21.07.2016 – SHIV seeks to provide shelter in village
08.03.2016 – SHIV gets hospital project rolling
12.11.2015 – Oil crisis adds challenge for Nepalese startup
13.10.2015 – Entrepreneur looks to hemp to rebuild Nepal
Phone Number: (977) 98033 19991
Key Contact: Dhiraj K. Shah
Kathmandu, Nepal

List your firm online at hemptoday.net/connect

3. PRINT EDITIONS

Full PDF versions of our special HempToday print editions produced for major hemp events around the world.



+The Big Hemp Yearbook (PDF)

4. FREE PRODUCT LISTING

If you're a wholesaler, you get one free product listing for three months on HempTrade, which helps hemp buyers & sellers – farmers, processors and producers – connect in the rapidly growing hemp raw materials and wholesale markets. Secure and with your sales supported by other HempToday media assets.

The screenshot shows the HempTrade website. At the top, there's a navigation bar with 'HempTrade' and various menu items. Below that, a featured product is displayed: 'HEMP EXTRACT IN MARULA OIL' for €33.50. Underneath, there's an 'All Products' section with a grid of product images and their respective prices. The website has a clean, modern design with a focus on product listings.



5. YOUR STORY

Working with you, we develop a 400-word interview or feature story about your firm, products, key executives and/or services which is published on HempToday.net

Three plans to choose from:

<p>Silver</p> <p>per year</p> <p>€ 180</p>	<p>Gold</p> <p>per year</p> <p>€ 300</p>	<p>Bronze</p> <p>per year</p> <p>€ 120</p>
--	--	--

SIGN UP TODAY AT: hemptoday.net/subscribe



Harvesting hemp by hand in Poland. Big and small players have quickly emerged as the industry grows throughout Central Europe

Western opportunities

As U.S. hemp gets rolling, Euro firms can benefit

While European hemp companies have found a fertile market in the United States for years, the growth of farming and processing in the USA is bringing further opportunities to Euro firms which have developed world-leading technology to turn out hemp-based products.

From specialized farming equipment to high-tech extraction facilities, Hemp USA needs to ramp up production for a wide range of products – even as the industry continues to be under constraining government-controlled programs.

“The greatest bottleneck we’re seeing along the value chain is among U.S. processors on the dual purpose side of the industry,” said Thomas Dermody, Executive Director of the Colorado-based Industrial Hemp Research Foundation (IHRF).

“From on-site to secondary processing, we need a vast ramp-up in available technology, or (U.S.) companies need to work on licensing agreements that let them bring over European tech to handle the vast amount of raw material we could see by harvest season,” Dermody told HempTo-

day, noting some estimates that Colorado alone could produce hemp from 35,000-46,000 acres (86,000-114,000 ha.). “Where we are going to process all that material remains to be seen,” Dermody said.

Demand for knowhow

And while the USA boasts as many as 25 state-run hemp research programs under way or soon coming on line, U.S. industry sources say the lessons learned from Europe’s many years of trial and error can also prove valuable as the world’s biggest market for hemp goods continues the shift from an export-driven supply model to a home-grown value chain – an opening for European hemp consultancies.

For European hemp firms, the potentially behemoth American hemp industry carries a double-edged sword, of course. Transferring technology and knowhow to the USA is sure to speed up U.S. supply chain development, thereby decreasing demand from elsewhere in the world. Still, that’s seen as a longer term proposition that leaves plenty of room for short-term export growth among Euro hemp firms,

said American hemp adviser Richard Rose.

“While U.S. states dither by requiring research only by universities, Europe is growing almost as much hemp as Canada, and allowing full commercialization with THC as high as 1%,” Rose said. “Many (U.S.) states as well as Canada ban hemp CBD, losing 98% of potential value,” he added.

“So Europe is setting the stage to be a supplier to the world, including China. Want cheap production? Go to Ukraine. Want massive fields? Go to Poland. Want hassle-free extraction? Go to the Czech Republic. Want the best hempseed oil in the world? Go to Italy,” Rose said.

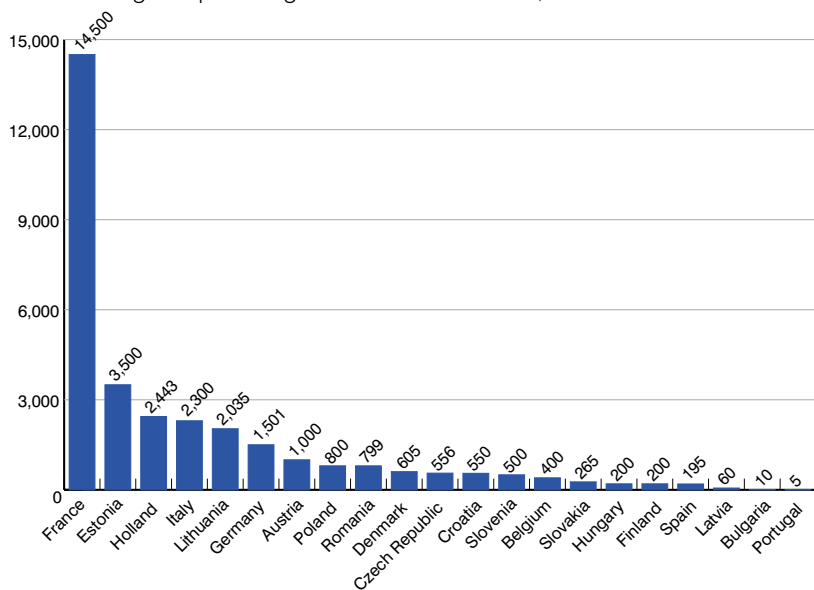
Central Europe expands

Rose’s analysis signals another trend in Europe: The rise of hemp in Central European countries, several of which have vast farmland and are quickly waking up to hemp’s potential in farming, processing and marketing. (See stories, pages 14, 16, 17)

Those states are led by tiny Estonia, which this year jumped into second place behind France in total hemp hectareage, according to EIHA’s annual field report. But

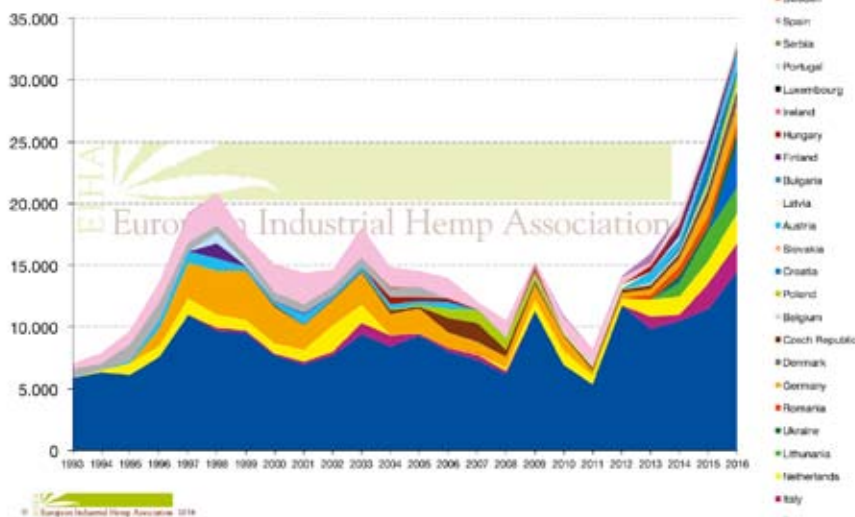
Leaders in the fields

Leading hemp farming nations in the EU 2016, in hectares.



Historical trends

Hemp farming hectares by EU country since 1993



Hemp vs. flax

Price development of natural fibers since 2003.



Central Europe's potential is best spelled out in bigger countries such as Poland, Romania and Ukraine, all of which have vast farmland and rich histories in hemp farming, processing and research; they also have examples to follow in Slovakia and the Czech Republic, more developed markets that make up a sort of advance guard for Central European hemp.

Foods going mainstream

In wider Europe, branded hemp food and food raw materials suppliers continue to enjoy an expanding market across the continent, led by Germany, where hemp foods have moved into the mainstream. But while CBD markets have appeared to hold up over the past year, the sector has not been without its problems.

For starters, the push for a medical designation on CBD in the UK roiled industry players late last year. Around that same time, red flags also went up over an amendment to the federal Regulation on Prescription Medicines in Germany that essentially designated all CBD-laced products as prescription-only without any consideration for dosages or administration methods. The amendment was based on an earlier recommendation by an expert group from Germany's Federal Institute for Drugs and Medical Devices

Those developments quickly drew a proposal from the EIHA calling for a three-tier regulatory framework for CBD products to address the current "tenuous patchwork" of rules covering CBD and hemp extracts in the European Union. Changes would address unclear rules for hemp foods and supplements, guidelines affecting such things as dosage levels, rules for over-the-counter products such as supplements, and CBD levels allowable in food products.

Isolates drive CBD

The developments in Europe were meanwhile compounded by a clampdown last year in the USA – an anchor CBD export market – over what government regulators called dubious health claims being made by some CBD vendors.

Despite those hiccups, and the potential market interruptions they imply, CBD shortages could – ironically – emerge throughout the summer, driven by the fast growth in demand for isolates, which require more material than simple CBD oils or extracts, said Richard Rose. "There could be a glut come post-harvest in October, but until then shortages are possible," Rose said.

The development of isolates alone shows a CBD sector that is gaining in sophistication and expanding into more and more sub-sectors, which Euro CBD producers are quickly populating with new products.



Renno Nurmela, owner of Tiigikalda OÜ, which planted hemp on 3,000 ha. this past spring.

MATTI KÄMÄRÄ/PÖHJARANNIK

Flexing its muscles, tiny nation now No. 2 grower

Fueled by a growing European demand for hemp seeds, tiny Estonia in the EU's Baltic region has rapidly emerged to become the continent's second biggest hemp grower behind France. After cultivating 3,500 ha in 2016, preliminary estimates are that Estonian farmers this year have planted roughly 6,000 ha.

While that finds Estonia a distant second to France (14,500 ha in 2016), it puts the nation, population just 1.3 million (think Dallas or Brussels) above its much bigger European hemp brethren, such as Italy (2,300 ha) and Germany (1,500 ha), according to figures from the European Industrial Hemp Association.

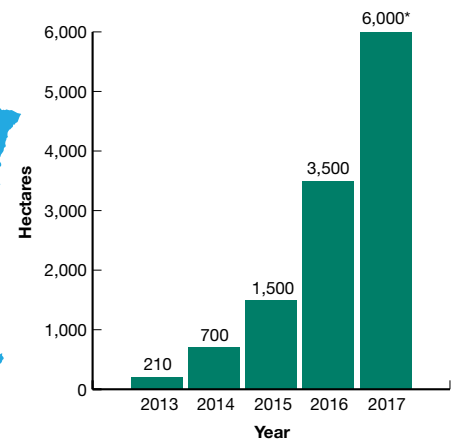
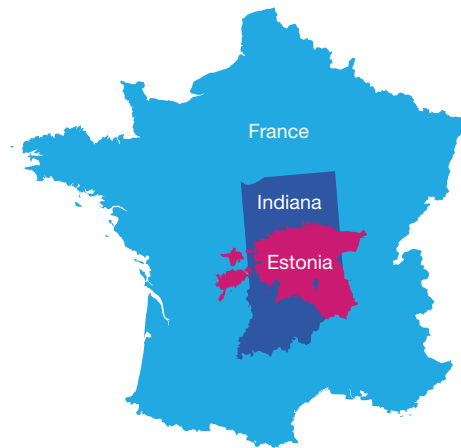
Growing awareness. "Farmers are starting to become aware of the benefits of hemp growing and the know-how is getting better," said Margus Kesa, Export Manager at Tiigikalda OU, an agro firm that this spring planted hemp on 3,000 ha – one half of the company's total hectareage; with 6,000 ha total land, Tiigikalda is one of Estonia's biggest organic farming firms.

Tiigikalda recorded a yield of 800 tons of hemp grain from 1,200 ha planted last year in Finola, Europe's leading oilseed hemp variety, making it the biggest hemp grower in Estonia, according to Kesa.

Europe's hunger for seeds. The overall growth in Estonian hemp fields is to fuel demand for hemp seed mostly from Europe, Kesa said, with the Estonian hemp-ag industry anchored mainly on a few big farming concerns who grow on an industrial basis (100s of hectares). "The fact that there

Big ambitions

Estonia, 1/14 the size of leading Euro hemp grower France – half the size of the U.S. State of Indiana – has risen into the No. 2 position of European hemp growing nations over the past four years. Estonian hemp fields in hectares:



*Estimate

HempToday

is demand for high quality seeds at a good price makes hemp growing attractive to Estonian farmers," he added.

"We still have a lot to do about working together and finding the best solutions for export," Kesa said. "As in all of agriculture, it's more valuable to sell products that have a higher level of processing." In that vein, Tiigikalda together with some other big farmers are thinking of ways to raise the level of processing of its seeds, boost yield and improve the quality of its exports

"It all starts with farming techniques and know-how, and how we handle the harvested seeds and how we process it," he said.

Potential in CBD, fiber. While the bigger firms are mainly working the export markets, some small farmers in Estonia are growing hemp for hulling and oil pressing for the local market, Kesa said. Estimates for that domestic production have been in the 20-ton range.

While Estonian hemp growers have mainly eschewed the lucrative CBD sector, and no known operators are farming for fiber, Kesa sees the potential to grow into these sectors.

"We don't see any slowdown in the demand from Europe and North America," Kesa said. "So there seems to be a bright future for Estonian hemp farmers."

HEMP EVENTS

The Most Comprehensive
Hemp-Centric Exposition and
Trade Show on The Planet!



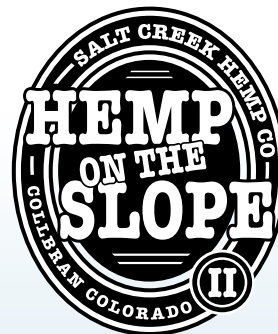
April 6-7 • 2018
Colorado • USA



NoCoHempExpo.com



Hawaii Hemp Conference
June 10, 2017
Hilo Hawaiian Hotel | Hilo, Hawaii
HawaiiHempConference.com



Hemp on the Slope II
July 22, 2017
Salt Creek Ranch
Collbran Colorado • USA
HempOnTheSlope.com



@ Arise Music Festival
August 4-6, 2017
Loveland Colorado • USA
AriseFestival.com



Produced by Colorado Hemp Company

HempEvents.org

Podlaskie Konopie, one of Poland's leading hemp companies, farms, processes and builds with hemp. It also sells seeds, fiber and shivs.



Building an industry

Entrepreneurs lead the hemp vanguard in Poland

All across Poland an ambitious, creative cadre of young entrepreneurs is fueling a small but fast-moving hemp revival, producing and marketing everything from food and drinks to building materials. That's creating increasing demand for locally-grown hemp, and therefore steady expansion of Polish hemp fields, expected to grow to around 1,300 ha (3,200 acres) this year, nearly double the 2016 hectareage of 700 (1,700 acres).

And hemp would seem to be a perfect crop for the Polish agriculture sector, which suffers the lingering after-effects of socialist policies imposed during the post-WWII period to 1989, resulting in fundamental structural inefficiencies in its rural areas.

Farming landscape

While 97% of Polish farmland is now in private hands, the average farm is a mere 8 hectares (20 acres) while the majority are as small as 1.0 ha (2.5 acres), held by farmers who work their micro plots on a "from my field to my table" basis – with very little outside commercial activity, leading to stagnating local economies. Growing hemp, particularly for CBD and other cannabinoids, could

lift the economic fortunes of the nation's rural towns and villages. Beyond that potentially lucrative end product, a handful of Polish entrepreneurs are already creating localized value chains in which they are growing, processing, packaging and marketing hemp-based products to nearby shops in a Community Supported Agriculture model that could be replicated in other depressed farming areas.

Serving other European markets – especially with hemp foodstuffs – is also an opportunity for Poland, a proven exporter. The country, for example, is one of the largest suppliers of apples and berries in the world.

Finally, there is a wide range of European Union farm support programs available to Poland that could help to revive the sector – funds that often go unclaimed due to a lack of the innovative ideas they seek, much to the lament of Polish agriculture officials.

Science & business

Much of Poland's hemp resurgence is based around the Institute of Natural Fibers and Medicinal Plants (IWNiRZ), which dates to the 1930s. IWNiRZ started to realize its commercial potential in 2015 when it began using green

matter it was leaving behind after harvesting contracted fields for fiber and seeds in Hemp Element, a CBD brand now available in pharmacies, herb shops and health-food outlets all over Poland.

Seed science breakthrough

The success of that product spurred the Institute to begin looking into development of a broader portfolio of commercially viable products based on ongoing R&D projects in hemp composites, plastics, textiles, building materials and foods as well as machinery and processing technology.

Most recently IWNiRZ researchers announced that they have developed a new hemp variety that produces four times more seed yield for edible oil than typical hemp plants. The monoecious strain, named Henola, was recently approved for Poland's National List of Cultivars by the Research Center for Cultivar Testing after a two-year review.

With Poland's rich hemp history, its vast, fertile farmland, and a growing demand for healthy, eco-friendly products among the rising middle class, the nation of 38 million looks poised to become a clear leader in Europe's broader hemp resurgence.

Ukraine gears up exports

A need for co-financing and technology transfer

Targeting a growing number of worldwide export markets, the Ukrainian hemp industry is gradually increasing output, with more than 4,000 hectares planted this year, according to the Ukrainian Hemp Association. But to keep expanding, Ukraine needs the machinery and factories to process ever larger yields, industry observers say.

Last year Ukrainian farmers planted a total 3,400 ha. in hemp. While 2,800 of those were planted for seed production, the remaining 600 were grown primarily for fiber, according to the Association. Those figures put hemp output at nearly triple earlier reports which estimated Ukrainian fields at 890 hectares in 2016.

“Production of hemp in Ukraine is increasing, as is the export of unprocessed hemp seeds and fiber,” said Alexander Prokayev, owner and director at Agrorit Agribusiness Solutions in Dnipro (the Ukrainian city was recently renamed from its original Dnipropetrovsk).

But to better position itself in the global industrial hemp market, “Ukraine needs both co-financing and high-quality technology transfer from partners both domestic and global,” Prokayev said.

Export contracts stack up

While most hemp coming out of Ukraine is destined for the European markets, contracts are already in place with buyers in the United States, Uruguay and Paraguay, according to Oleksiy Pavlenko, a former Ukrainian Minister of Agrarian Policy who works with the hemp industry. Negotiations over export contracts are in the final stages for deals in Iran, China, the Baltic States, Chile, Italy and Colombia, he added.

The recent success of Canadian producers in the South Korea also has gotten the attention of Ukrainian hemp interests, which have started exploring that and other ASEAN markets where the demand for foods rich in Omega 3 and 6 is surging.

Meanwhile on the domestic market, a number of processors and producers of hemp products is growing. “There are a bunch of small companies turning their sights toward hemp,” said Sergiy Kovalenko, CEO at Hempire, a Kiev-based hemp construction company that’s done projects around Ukraine and abroad. Those firms are making everything from food to rope and textiles.



Michel Terestchenko, Mayor of the Ukrainian city of Hlukhiv, sees hemp as a potential engine of economic growth for the Sumy region, a traditional hemp farming area.

Kovalenkov said hemp building is showing great promise as his firm keeps work crews busy building custom dome-shaped homes from hempcrete, and with insulation and renovation projects employing a range of hemp hurd and fiber-based construction materials.

Rich history in science

Ukraine has a rich history in cannabis science, mainly based on the work of the Ukrainian Institute of Cannabis Seeds (UICS) and the Institute of Bast Crops (IBC) that dates to 1932. “Ukrainian scientists have made a significant contribution to the development of seed science and created many hemp varieties,” said Pavlenko. “That ensures the growth of the industry, and the agriculture ministry fully supports them,” he added.

IBC is one of the world’s largest centers for developing new hemp varieties, focusing on improving fiber quality, yields, and diminishing THC content. In 2009 it created the world’s first non-narcotic varieties of hemp; and before that, the first varieties with insignificant amounts of THC.

Located in the the city of Hlukhiv in

a traditional hemp farming area of the Sumy region, IBC also works with local municipal authorities on hemp initiatives. The city’s Mayor, Michel Terestchenko has plans to build a hemp healing center as part of an effort to re-center the local economy – at least in part – around hemp. The center is to be located in what was once the residence of Mykhailo Terestchenko, Mayor Terestchenko’s father and a Ukrainian industrial magnate and philanthropist who lost everything after the Bolshevik revolution of 1917.

Shackles are off the industry

All the activity in the Ukraine is helped along by a compliant approach to hemp farming and processing. While farmers need a license, permission is easy to obtain, with officials essentially treating hemp like any other crop.

That leaves the shackles off Ukrainian hemp industry advocates who are determined to stake their claim in the growing international market.

“Just imagine,” said Pavlenko, “Ukrainian cannabis seeds are now being sown and processed on both sides of the ocean.”

Of markets and miracles

Hemp's power to fuel profits, and lift us from bondage

Haïle Selassé Tefari is the founder of France-based Hemp Service International (HSI), a wholesaler and retailer of cannaromatherapy. He formerly worked as a trade analyst at Newedge Financial, a Futures Commission Merchant with operations on the New York Mercantile Exchange. He is also general secretary of the Association of Ethiopian Unity.

HempToday: Cannaromatherapy is a relatively new development, not widely known or understood. What is it, and what are the benefits that cannaromatherapeutic products bring?

Haïle Selassé Tefari: Cannaromatherapy is a combination of cannabis and aromatherapy – the science of essential oils. It's about making highly targeted solutions that gather the phytocannabinoids in hemp and its extracts and the terpenes more characteristic of hemp essential oils, as well as distilled essences from other plants.

The main benefits are that the cannabinoids, such as CBD and THC, are known to cause suppression of cancerous cells while leaving healthy cells intact. The terpenes in essential oils improve assimilation of the cannabinoids by the organism.

HT: As a trade analyst in commodities, how do you see the market for hemp derivatives unfolding over the next five, 10, 15 years?

HST: No matter what derivatives we talk about, the possibilities hemp offers point to a situation where we'll eventually have a number of regionalized trading hubs, with food derivatives (seed, oil, protein flour) and hemp-based food supplements accounting for the bulk of market share among the hemp sectors.

HT: There doesn't seem to be a lot of transparency around CBD. What's the key to building trust with the consumer?

HST: The varying national legal frameworks for hemp products containing CBD, as well as the relatively high technical requirements for production and analysis, leave the market wanting for more clarity and standards. Education is the key. As more people comprehend the dynamics of hemp, the more we can learn about our own nature and our relationship with nature in general.

HT: The path from the New York Mercantile Exchange to the hemp business might seem unusual to some. Are you



“Beyond its miraculous intrinsic properties, hemp is a precious catalyst for the social fabric.”

following a path between the two, or did you take another path when you branched out from the world of finance?

HST: During my years on the floor of the NYMEX, I used to cherish the moments when the ticker would display changing market prices for hemp derivatives instead of petroleum based products. After years as a trade analyst, I began to see the potential to create a sustainable investment fund, and that hemp had the potential to be the No. 1 diversification instrument for a profitable economic structure that respects the environment.

That's when I decided to leave New York and the financial world and relocate to the countryside in southeastern France. Once there, and after many long hours of R&D focused combining ancient science and modern progress with hemp, I formed a consultancy to help producers with such things as cultivation, sowing, processing, product development and marketing of hemp products.

HT: While HSI operates globally, your head office is located in France. How do you see things unfolding in the French hemp industry going forward?

HST: If France is to remain a world leader in hemp production, French proponents will need to adjust and embrace other core applications. Why should most of the French hemp fiber now being produced go into the construction industry when the real estate market keeps contracting? The French hemp industry, to be successful, may therefore need to reorient itself toward such things as expanding sowing seed production, and to organic grains, office papers, biodegradable hemp plastic, fine textiles, biodegradable hemp plastic, and even hemp ethanol.

HT: Tell us a bit about your work with the Association of Ethiopian Unity.

HST: Ethiopian culture has been essential to humanity since Ethiopians left the Eden region in the horn of Africa with their language 50,000 years ago in order to populate and civilize the entire world. While the world will not know peace as long as Africa is at war, the solutions to Africa's problems remain internal to Africa and Africans. Our objectives are to develop sustainable business models in more advantaged nations so those advantages can, in turn, be shared in places where they are needed the most – not only in Africa but throughout the world.

HT: How does your faith figure into the life's work you have set out for yourself?

HST: Following the example of Jesus Christ in the name of His Majesty Haile Selassie I gives our generation great inspiration to reach its full potential. To that extent, our personal hemp-related projects are just humble industrial engines to realize a more efficient, pollution-free economy in harmony with the universe.

Beyond its miraculous intrinsic properties, hemp is also a precious catalyst for the social fabric. It's a mystical yet powerful plant but also a double edged sword: It can backfire on those who approach it with vain intentions. As with all the vital precepts modern man seems to have forgotten, our primary duty remains to lead the way out of mental confusion and spiritual bondage.



Herbs & Hydro

HEMP SERIES

www.tradycyjnymydlu.pl

Soap based on potassium is perfect for daily care of the body, especially for sensitive skin. It not only moisturizes; hemp oil has anti-aging properties, is nourishing, carries anti-inflammatory effects and accelerates skin regeneration.

Buckwheat hull is valuable for its anti-allergenic properties and air permeability.

Research confirms that products from linen and hemp show a wide range of bacteriostatic and bactericidal properties.

Linen stimulates restful sleep, is hygroscopic and thermo-regulating. In hot weather it absorbs moisture and excessive warmth, and during cold weather it traps body heat.



VEGAN



100%
NATURAL



NOT TESTED
ON ANIMALS



Coming of age

At 15, pioneer Hempro Int. looks to greater challenges

Hempro International GmbH & Co. recently gave itself a birthday present, acquiring the hemp accessories brand PURE from the original creator, whose owners retired.

Now a fully mature teenager marking its 15th year, Düsseldorf, Germany-based Hempro Int. is a vertically integrated producer and wholesaler of hemp foods, textiles, accessories and cosmetics products.

Adding the PURE brand to the Hempro Int. portfolio is only the most recent milestone in a corporate history marked by careful strategic acquisitions and organic development of the company's product line, which includes HANF FARM, its consumer brand for hemp foods. That division has been a major factor in the company's emergence as a leading player in the European hemp market. Next to its own-brand products, Hempro Int.'s main business is industrial scale hemp foods production and bulk distribution, through which the company is meeting demand for raw materials in the fast-growing hemp foods sector in Europe and around the world.

Cosmetics sales strong

While hemp food hit its stride over the past two years – especially in Germany – Kruse says this year is showing a sharp rise in sales of cosmetics products from Hempro Int.'s THE HEMP LINE family of high-quality creams, soaps, shampoos and lotions. From January to March this year, the division, which date



Hempro Int. founder Daniel Kruse in 2008.

THROUGH THE YEARS

Highlights in the development of Hempro Int. GmbH & Co.

2002

- Company is founded as Hempro International e.K.



- Beginning of distribution of hemp clothing from Braintree in Germany.

2003



- The Hemp Line is launched as a cosmetics brand.

2004

- Beginning of distribution of HempValley products in Germany.

dates to 2001, recorded a 50% increase in sales compared to years past, Kruse said.

Like all big players in the fashion market, the company also sells a line of affordable, durable, basic hemp fashions – also under THE HEMP LINE brand – with men’s and women’s collections from both 100% hemp and hemp/organic cotton blends. That division of the company was launched in 2008.

With its acquisition of PURE, Hempro Int. strengthens its position in hemp textile-based accessories. While the company had been selling PURE bags since 2005 under a license, its knowledge of the brand, and bringing it fully in house, opens broader marketing and product development possibilities, Kruse says.

As Hempro Int. has carefully added more and more products through the years, the deal with PURE was a special one. “We have a long history with these products, their creators and the brand,” Kruse said. “So it was a natural fit. We know the owners personally, and it all went down as deals like this should, with both sides really happy in the end.”

Finding Jack Herer

Kruse first got into hemp when he read a magazine article about the plant and its possibilities back in the 1990s. Research led him to the Jack Herer book about hemp, “The Emperor Wears No Clothes” (in the German translation by Matthias Bröckers “The Rediscovery of the useful plant Hemp”), and he was hooked, recognizing the hemp industry as a perfect vehicle for his personal vision of combining ecology and business.

HanfHaus Dusseldorf, which opened its doors in 1995, was the foundation stone for Kruse’s hemp career, he said. Since that time, he has successfully navigated the sometimes treacherous path through hemp, overcoming the obstacles through determination and collaborative decision making at the strategic and



Daniel Kruse with Dan Herer of the Jack Herer Foundation at EIHA in 2016. It was the late Jack Herer’s book that started Kruse on his hemp career.

“The goals must be to make the world better, greener and more sustainable, and to have economic success in doing so.”

– Daniel Kruse

management levels.

“I’d never have even thought about the kind of issues I’d be confronted with,” said Rebecca Kruse, Hempro Int.’s Co-CEO who has 10 years with the company after first joining as an intern. “For example, our product diversity is boon and bane at the same time,” she said.

“We’ve often considered letting go one of the divisions to adjust the overall business. But then we think about how much work and lifeblood we’ve invested,” she said of the often tough decisions the company has faced.

That’s aside from the day-to-day challenges of running a fast-growing

business that has Hempro Int. racing to keep pace with its customers as the hemp industry itself races ahead.

Meeting the challenges

From Kruse’s perspective, 15 years of successfully managing the challenges of a hemp business puts Hempro Int. in position to fulfill the bigger vision that he started out with. “The goals must be to make the world better, greener and more sustainable, and to have economic success in doing so,” he said. “To create jobs and to generate financial independence for the company by successfully combining ecology and economy.”

2005

- PURE brand accessories are added to portfolio.

2007



- Rebecca Kruse joins company.
- The Hemp Line expands into food products.

2008



- The Hemp Line brand of clothing is launched.

2009

- Official name changed to Hempro International GmbH & Co. KG.
- The Hemp Line brand underwear collection launched.

2012



- The Hemp Line food products are relaunched under HANF FARM brand.

2016

- The company acquires the PURE brand of hemp-textile accessories.



How hemp time flies

Rebecca Kruse reflects on her decade in the industry

Rebecca Kruse, CEO of Düsseldorf-based Hempro International GmbH & Co. KG, this year marks her 10th anniversary in the hemp industry. She is responsible for hemp textiles and accessories at Hempro Int., a producer and wholesaler of a broad range of hemp raw materials and end products including foods, feed, fashions, accessories and cosmetics. One of Europe's leading hemp food companies, Hempro Int. attributes its success to consistent implementation of a strategy focused on product quality.

HT: What were your beginnings in hemp? How did you get into the industry?

RK: I met Daniel (Kruse) in 2003. I already had one of the PURE hemp bags at that time. So perhaps that was a sign. When I finished my studies in economics and business administration in 2006, Daniel offered me an internship. After that I began some projects in private label hemp food products. I'd planned to stay on for just one year, but it went on and on, project after project and challenge after challenge.

HT: You've been around hemp for a full decade. How fast did the time fly?

RK: Sometimes too fast. When I came into Hempro Int. for an internship we were only four people. Now we are 12, just counting the office staff. We had no private label food range or textiles. At that time, we just did wholesale with different hemp products. My first job in 2007 was building up our own food product range. With a lot of research we finally found the right packaging, production facilities, layout, etc. First, we named our food range "The Hemp Line" just as the cosmetics and later also the clothing range. In 2012, we relaunched our food range under the HANF FARM brand.

HT: What was the arc for the food business? How did that develop?

RK: We gradually built up more and more raw-material business for food and also the production of bulk hemp food products – hulled hempseeds, hemp oil, protein powder, etc. Over time, we started cooperation agreements with production companies and also bought our own machines for de-hulling and for protein



“I'd planned to stay on for just one year, but it went on, and on, project after project.”

powder production. Of course, the “bio-boom” in the food sector helped us to reach a higher level, and to be accepted as a reliable partner for bigger food companies.

HT: And when did the company move into the clothing and fashion sector?

RK: Our clothing range, “The Hemp Line,” started in 2008 with some basic T-Shirts because our supplier of hemp/organic cotton apparels wanted to focus more on production than on their own collection.

HT: If we just focus on Europe, how would you assess the market generally?

RK: First of all, hemp food looks very promising. Thanks to its valuable ingredients and the increasing awareness about healthy living, hemp has become a real superfood. Beyond that, hemp is one of the most sustainable and versatile plants on earth, so it is the perfect raw material for all kind of products, like textiles, building

materials, etc. And I am sure many more applications are waiting to be discovered.

HT: With respect to the German market itself, how do you see the recent legalization of medical marijuana in your country affecting hemp? That has to be positive, no?

RK: In fact, this is a very positive development. Though it's not our segment, it helps us too as hemp and other cannabis products will be more present in the media. People might research marijuana and also find out more about industrial hemp and its versatility.

HT: What other parts of the world look interesting for hemp these days?

RK: Eastern Europe is especially interesting for the food market but also as a cultivation area. We've also recognized that South American countries such as Chile and Uruguay also are fighting for the development of their own industrial hemp industries.

HT: Who are your hemp heroes?

RK: Jack Herer, Franjo Grothenhermen, the people from SHIV – Nivedita and Dhiraj K. Shah, who are helping earthquake victims in Nepal building hemp houses; and, of course, my mentor, teacher (and former husband) Daniel Kruse.



Four indicators on the CBD roadmap ahead



**JOSCHA
KRAUSS**

It's easy to get wrapped up in the day-to-day challenges of the medical cannabis sector. Running any business comes with its headaches, but as we all know, medical marijuana and hemp CBD are probably the most challenging sectors in the entire industry. While an occasional glance in the rearview mirror is good, it's best to focus on the road ahead. Here are four key indicators – and some road signs – to guide the way forward:

Quality: We all know there are dubious players out there peddling products of questionable quality, putting a drag on the CBD sector generally. Their antics, which too often draw official attention and tend to portray CBD negatively in the media, can be countered by responsible market players, in part, by focusing on quality in our own CBD producing operations. As the sector continues to develop, setting high internal standards will help guide us on the way to establishing and implementing the highest quality using safe and environmentally-friendly methods. Such standards will also help in the further development of proven large-scale manufacturing processes. At Medical Hemp, this is the strategy we follow and instill as we deal with a rapidly expanding network of high-caliber and experienced market players. – both contractors and customers.

Regulation: The matters of quality and standards naturally lead into the regulatory framework needed to advance the crucial CBD sectors – cosmetics, medicine and food supplements – beyond their current status as niche products in the broader marketplace. As this framework gradually comes together at both EU and national levels, our production and business practices can inform the process, with the goal to establish clear rules and regulations that create a fair and vibrant market in which the bureaucratic barriers to doing business are as low as possible. This is

critical because the current unclear rules inhibit sales, and can turn off potential business partners as well.

Research & Development: One has to marvel at the ingenuity in the hemp business. With a broad and highly segmented array of CBD-infused products already on the market, research and development continue apace all over the globe. This is critical on two accounts. First of all, the wider the range of applications, the broader the overall market for CBD becomes. As it seeps into sector after sector, and subsector after subsector, awareness grows. The legalization of medical cannabis in Germany is also likely to spur research on cannabis in all of its medical forms including CBD, especially critical patient research.

Communications: At official levels, we're encouraged by the progress EIHA has made in establishing an interface at the EU level, where the

Association took up some issues this year on behalf of CBD, and where their heads are found not to be as thick as some might think.

On the public relations front, hemp, CBD and medical marijuana all begin to seep into the mainstream media – yet not always in

the most flattering terms. It means we need more of a pro-active approach to shape the industry's overwhelmingly positive message – and hemp's image. We can do this individually through strong corporate communications, but it will take industry-wide joint efforts too.

Light ahead: When we do glance into the rearview mirror, we can see a CBD sector that's made great and hard-fought gains thanks to a very few bold pioneers, some of whom have been fighting the good fight on behalf of hemp for nearly two decades. We see a few enlightened individual CBD markets – Czech Republic, Austria, Holland – which are vibrant proving grounds for how the business should work. That's progress. And we, as an industry, have earned the right to look on those advancements with pride.

But in the fast-moving CBD sector, there's not much time to look back.

When we do glance into the rearview mirror, we can see a CBD sector that's made great and hard-fought gains thanks to a very few bold pioneers.

Joscha Krauss is CEO at MH medical hemp GmbH, an EIHA member.



Your reliable and competent partner
for Cannabidiol and Cannabinoids
in B2B and B2C

Beyond the hype, what to look for in CBD



MACIEJ KOWALSKI

Hemp and its phytocannabinoids-rich extracts made a stunning entrance to the nutraceutical business in the last few years. After the initial hype, many people started to ask questions about quality – and rightly so!

With so many new entrants on the market it is crucial to learn how to distinguish good quality products from cheap stuff that would have a negative influence on your end products. As high volumes of low quality products of dubious origin became available on the market recently, companies looking for reliable supply of phytocannabinoids-rich extracts have to be cautious and expect only the best that cannabis has to offer.

The bio-accumulator

Hemp has always been known as a bio-accumulator – a plant that sucks up everything it can from the ground

and air. That can lead to high levels of heavy metals, PAHs and pesticides that can stay in the ground for several years after their last use. To avoid the presence of possible contaminants it is important to source your hemp extracts from companies that control the end-to-end process, from

Make sure your customers benefit from the full spectrum of the cannabis plant.

cultivation to extraction.

The extraction technique itself is also of utmost importance. The only recommended method is supercritical fluid extraction (CO₂) – as opposed to solvent-based extracts. Supercritical carbon dioxide can be used to extract all the beneficial compounds found in cannabis plants without any harmful contaminants. Manufacturers

with experience in this technology can also produce extracts leaving aside useless waxes that in many cases make post-processing and product preparation more difficult.

Key in the color

An easy way of judging the quality is a mere glimpse at the extract – avoid dark, thick oils and go for light-green or golden extracts. Expect full analytical support from your supplier, and make sure the cannabinoids present in the offered material are in neutral forms (such as CBD), not its acidic state (e.g. CBDA).

Above all, to make sure your customers benefit from the full spectrum of the cannabis plant, look for natural extracts and avoid products enriched with isolated or synthetic cannabinoids.

Maciej Kowalski is CEO at HemPoland



CannabiGold

Top quality hemp extracts

- > Bulk supplies
- > Branded CannabiGold food supplements
- > Private label and white label solutions
- > Hemp infused edibles and beverages
- > e-liquids

Our company is a major, licensed producer of industrial hemp located in Poland. We offer advisory service and brokerage for the hemp industry in Poland, managing the whole process from gathering EU certified seeds, soil preparation and sowing, to harvesting and processing the crop. Having full control over the end-to-end processes we can guarantee uncontested quality of our products and confirm that our hemp extracts, rich in naturally occurring phytocannabinoids are produced from 100% certified European Hemp, **free of pesticides, heavy metals, solvents and synthetic cannabinoids.**

Our production site is equipped in a cutting-edge, custom-engineered **Supercritical Fluid Extraction (SFE)** device made specifically for producing hemp extracts. Thanks to our dedication to hemp, our products contains not only full spectrum of cannabinoids naturally present in Hemp, but also other natural substances potentially beneficial for your health (e.g., terpenes, flavonoids)

CannabiGold is a top quality, state of the art food supplement, rich in naturally occurring cannabinoids, terpenes and flavonoids. Our golden oil contains a guaranteed concentration of CBD, confirmed daily in our professional laboratory.

All CannabiGold CBD oils are produced with CO₂ extraction in our privately-owned facility, under close supervision of PhD scientists with vast experience in innovative extraction methods. CannabiGold is fully made of industrial hemp grown and processed in the EU, meeting all EU standards and regulations.



Commercial offer and bulk sales available from our Head of Sales **Jacek Kramarz**

✉ jacek.kramarz@hempoland.eu
☎ +48 693 471 400

www.cannabigold.eu

HEMP IN ITALY

LEGAL SINCE 1997, REGULATED IN 2017

In recent years, Italy has witnessed a strong acceleration in hemp business, many start-ups, companies and associations have embarked on this path by entering into a pioneering sector without real government support.

Only recently, the Italian Government expressed a

new law of January 2017, in which potent applications of hemp are officially formalized, provided public incentives and clarity on the legality of cultivation and control methods.

In fact, industrial hemp cultivation is legal since 1997 for European law. However,

without proper regulation, postponed for twenty years, coupled with the lack of effective national coordination, Italy is nowadays to play a marginal role with a cultivated area of 3,000 hectares in 2017 (less than 10% of European cultivation) when in the '40s were more than 80,000 hectares.

Only in the last 5 years there has been a real interest and a substantial evolution of the sector, with the emergence of several realities especially in the seed processing sector for human consumption and in the second transformation such as bio-building and bio-plastic products.



Coordination, information and technical support

The Hemp Nation Federation was born as a need to represent, protect and coordinate the many initiatives spread across Italy towards the Government, regional administrations and other industrial sectors. The federation was founded on February 20, 2016, the founding members are companies, experts and associations working for a long time in the world of hemp.

Membership is open to all those who believe in the need to jointly address the common good of hemp, allowing the harmonious and

non-competitive development of this sector with a vision of social and environmental sustainability.

One of Federcanapa's key activities is the promotion of scientific research in all areas that industrial hemp includes, providing valuable information on cultivation, processing, transformation and potential applications. This work provides a solid foundation of knowledge from which all members can draw, accelerating the growth and growth of the industry.



South Hemp Tecno Industrial First Processing Plant in South Italy

The company was founded in June 2013 by Rachele Invernizzi represents the first plant for the primary transformation of hemp straws in South Italy. It aims to revive the agricultural and industrial chain of hemp, crea-

ting a great opportunity for farmers and entrepreneurs. The company aims to create more processing centers distributed on Italian territory by encouraging short chains and enhancing productive diversity.

SICILY

Excellent production in rapid development

The exclusive climate of these territories allows to harvest the fruits of the earth in advance, aiming at obtaining organic products of excellence, the hemp first.

The agricultural vocation of many territories, combined with the tradition of the old and the young people's innovation, create an ideal combination for the development of industrial hemp.

Kanesis is a young start-up who has developed the first bio-plastic hemp designed by Giovanni Milazzo, a young Sicilian engineer who developed HempBioPlastic (HBP), a thermoplastic filament used in 3D printing.



Trionfi Honorati Agrarian Company

It is a historic and virtuous example of excellence in farming, breeding and food production. The company is located in the Marche region (central Italy) and it is a model of energy self-suf-

iciency, good agricultural practices and respect for the environment and animals. In the recent years it has integrated the cultivation of hemp and produces a variety of hemp-based products.



‘Tracked, tested, trusted’

Diligence, focus on quality have fueled CBDepot’s rise

As the CBD business negotiates its way around the image and regulatory challenges it faces, Boris Bañas, CSO at Czech-based CBDepot, would offer some strategies for reaching a normalized, fully developed market.

“Transparency, efficiency and diligence,” says Bañas, are the keys that have helped his firm maintain a steady course in the emerging sector since startup in 2014.

“First, very few companies put real faces behind them,” said Bañas, aggressively marketing their sometimes dubious CBD formulations without identifying the actual people who run their companies – some of which often draw red flags from regulators and other governmental agencies, and in the process give the sector a black eye.

“We stay away from the ‘cowboy’ game and focus on working with professional buyers who are able to formulate safe products from the risk point of view,” Bañas said of his firm, one of Europe’s leading suppliers of natural cannabinoids and high quality cannabidiol-enriched products for the industrial and consumer markets

CBDepot diligently adheres to a self-established internal credo that leans heavily on industry-leading science, all the while sticking to existing regulations even if they don’t always make a lot of sense.

‘Über diligent’: “We’re über diligent in the potentially grey applications and avoid the black zones completely,” said Bañas. “Since we only work on a B2B basis, our clients are usually professional buyers from the food, cosmetic and pharmaceutical industries,” firms with high expectations regarding the science and the laws that apply to CBD.

“We work on a ‘tracked, tested and trusted’ basis,” Bañas said, making every effort to set market standards for corporate responsibility.

That’s helped CBDepot maintain a solid position in the constellation of CBD producers around the globe. But in the relatively risky CBD market, management and strategy are also critical to staying on course.

“We have a clean and lean partner-based corporate structure in which we put all the focus on scientific proficiency,” said Bañas. That science is anchored in CBDepot’s affiliation with the Prague Institute of Chemical Process Fundamentals (ICPF) at the Czech Academy of Sciences, where Bañas’ partner, organic chemist Jan Storch leads a scientific team constantly probing the edges of cannabidiol. The focus on science and quality is also guided by the quality demands of CBDepot’s joint venture



Boris Bañas, above, is CSO; Jan Storch, left heads CBDepot’s science team

CBDepot

CSO: Boris Bañas

Founded: 2014

HQ: Teplice, Czech Republic

Profile: Suppliers of natural cannabinoids and high quality cannabidiol-enriched products for the industrial and consumer markets

Edge: Strategic fit with Hemp Seed Oil Europe, Ltd., 100% legal and transparent operation running under a Czech government license and powered by the know-how and expertise of professionals from Czech Academy of Sciences.

www: cbd depot.eu

partners at Cannabis Pharma s.r.o., which is also affiliated with ICPF.

Science is everything: Storch, an organic chemist with more than 15 years’ experience, said the science is everything. “Our company believes that cannabinoid based products will contribute to future medical care in a broad and complex therapeutic range,” he said. “That’s why the science is so critical to our business.”

While Storch has been active in the CBD space since 2013, and in 2014 co-founded an R&D firm that developed the know-how which now underpins CBDepot operations, Bañas traces his hemp history to 1996.

That’s when, as a student working a summer job in Michigan, USA, he first came across “Industrial Hemp: Practical Products -- Paper to Fabrics to Cosmetics” a booklet by John Roulac, who would go on to found the organic food company Nutiva three years later. “Up to then, my only experience with hemp was recreational,” Bañas said.

His initial enthusiasm led to the setting up of a foundation “Why Not Hemp”

in 1998, which got funding to translate the Roulac booklet into his native Slovakian, eventually giving away 4,000 copies printed on hemp paper from Austria. The following year, Bañas started growing hemp for research under Slovak government licenses, and ultimately helped to push the Slovak government to adopt EU hemp-related farming rules in 2008.

In 2009 he teamed with partner Michal Tózsér to found Hemp Seed Oil Europe, Ltd., focusing on large-scale distribution of Canadian hemp seed ingredients for the food, feed and cosmetics markets in Europe – where it’s now one of the continent’s biggest players in those sectors.

Future challenges: For the future, Bañas sees short-term challenges in developing proper regulations for CBD in foods. “The situation is still not clear about hemp extracts and its tinctures,” he noted. “Several national food agencies interpret this listing in quite different ways.”

Also lacking is an EU-wide regulation on allowable levels of THC in foods. “Generally speaking, we live in a zero-tolerance region -- meaning a less than 0.0001% parts per million level,” Bañas notes.

Mid-term, there’s a need to clarify the medicinal status of CBD, CBG and other cannabinoids, Bañas said. “CBD is already an Orphan Drug (synthetic pharmaceutical drugs that are commercially undeveloped) in Europe. Activities of medicinal agencies in Germany, UK and Finland may serve as a guide to where the use of isolated cannabinoids is heading,” he added.

Having just launched a new product according to the Current Good Manufacturing Practice (cGMP) regime, a pharmaceutical industry standard, CBDepot looks to stay a course that’s always leading edge.

“The only way for us is to stay ahead and be ready,” Bañas said.

GROW WITH US

For Producers: Free listings first 6 months

- Get your high-quality hemp goods into people's lives
- Innovative products from artisans and mass producers
- Creative media in support of your offers

FOOD

SIMPLE RULES

For Buyers: Flat Fees, Lowest Prices

- A simple, functional system
- Always the lowest wholesale prices
- Low per-transaction fees

SEEDS & OILS

BUY SAFE

Your Guarantee

- A secure, dependable supply channel
- Highest quality products
- Responsive, personal service
- Money-back guarantee

CBD

HIGHLY TARGETED

Unique, Creative Media

- Affordable advertising options on HempTrade.eu
- Customized content on HempToday.net
- Big Hemp YearBook: Annual global review
- HempToday print editions at major global trade shows

REACH BUYERS DIRECTLY



Pushing hemp's potential

Adviser lends strong voice to industry's advancement

Despite challenges facing CBD, investors and startups shouldn't be discouraged from the medical hemp market, according to Daniel Kruse, CEO at Dusseldorf, Germany-based HempConsult GmbH.

While international studies have repeatedly demonstrated the efficacy of CBD, nagging uncertainties over current laws and regulations are still barriers to the sector, Kruse said, noting CBD firms should remain steadfast as the industry continues to work out a clear playing field for producers and distributors.

Kruse admits the CBD debate is complicated. "But the general trend in Europe is toward continued growth and development for the CBD business" said the 22-year hemp veteran. Add in an established and rapidly expanding market in the United States, and the fundamental underpinnings of the CBD sector are solid, Kruse said.

"Of course there's still a lot of work to do on legislation, regulations and restrictions related to hemp – particularly foods – if the market is to grow into its real potential," Kruse said.

Active in the industry

That's why his firm continues to take an active role in EIHA as the Association in turn interfaces with national and EU governments to push for a clear playing field for the hemp industry. Most recently HempConsult provided input to a position paper put together by the European Industrial Hemp Association (EIHA) that calls for reasonable rules for CBD – not only for food, but for cosmetics and medicinal products.

That document is aimed at enlightening European Union and national authorities across the continent as they continue to develop a regulatory framework for CBD.

Along with its efforts to help make clear rules for CBD, HempConsult was one of the first major industry players to begin to quantify the overall hemp sector by compiling worldwide market data as far back as 1996. That initial research is ongoing, producing regularly updated market reports on a range of indicators. In 2015 HempConsult joined with the Germany-based nova Institute to produce CBD and hemp food market studies. All of the research reports are available through the

Network Partners
HempConsult

nova Institute
for Ecology and Innovation

Hempro Int.

CHTA ACCC
Canadian Hemp Trade Alliance
Alliance Commerciale Canadienne du Chanvre

INDIAN INDUSTRIAL HEMP ASSOCIATION
IIHA

EIHA
European Industrial Hemp Association

For information on HempConsult research reports:
hempconsult.com

company's website at hempconsult.com.

Along with the current interest in CBD, the overall hemp market continues to boom, with rapidly growing numbers of farmers, producers, distributors and retailers coming on line, said

Kruse. While those sectors also face legislative and regulatory challenges, he doesn't see insurmountable hurdles anywhere in the industry.

Farming, processing, marketing

All the action means HempConsult is very busy these days, advising and supporting major global hemp players on farming, processing and marketing of hemp products. HempConsult also gives entrepreneurs a strong shoulder to lean on, helping new entrants to avoid early-stage mistakes that can lead startups to short circuit, Kruse said.

The advisory, which also gives guidance on organic certification and legal and regulatory issues, has its genesis in the long track record of sister company Hempro Int. GmbH & Co. KG, a vertically-integrated hemp firm that has operated in Germany, across Europe and China since 2002. That gives Hempro Int. a solid base of knowledge, network partners and experience all over the world.



HempConsult GmbH
CEO Daniel Kruse
is a 22-year veteran
of the hemp industry

HempConsult GmbH

Founded: 2012

Headquarters: Dusseldorf, Germany

Profile: Complex services for all aspects of establishing hemp businesses.

Edge: More than 22 years experience; strategic partnership with Hempro Int GmbH & Co. KG, established international player.

Website: hempconsult.com

Contact: +49 211-699 90 56-10

HempConsult



Flexible in the field

Hanf Farm's new combine harvests hemp's full promise

Rafael Dulon has been involved in nearly all aspects of the hemp value chain since 1995, after Germany resumed legalization of hemp as an agricultural crop the year before.

Now Dulon's firm, Berlin-based Hanf Farm GmbH, which he serves as CEO, continues to establish its footprint with the Multi-Combine HC 3400, an industrial-grade harvesting system marking its third year of success in 2017. The harvester is a major advancement that can help hemp farmers realize the full promise of the plant on a massive scale.

"Harvesting hemp on a large scale has always been complicated," Dulon said. "We believe our harvester is a major advancement addressing this issue – which has been an ongoing challenge for the industry."

The machine is ideal for special products (raw materials) such as seeds grown for multiplication or food, and leaves for such things as tea or powder.

A flexible solution

To give birth to the MC HC 3400, Hanf Farm started working with a range of contractors and suppliers in 2014 to develop a prototype. By August 2015 the company completed its initial working model which was employed during harvests the past two years.

Dulon has spent a lot of time on the road since, introducing the machine in what Hanf Farm sees as promising markets – as the demand for hemp raw materials shifts to focus on effective collection of the plant's flowers and leaves – a process that was only possible by hand in the past. The new MC HC 3400 system allows for the lopping off of the plant tops several times during the yearly vegetation.

In his talks with farmers thus far, Dulon has also heard from smaller growers about their equipment needs in the field. In that light Hanf Farm has already started work on a Multi-Combine Light Version – a smaller harvesting system that can be hooked up to existing tractors.

For Dulon, the harvester project is just the next logical step in his 20-year hemp odyssey.

As soon as Germany freed up hemp again at the end of last century, Dulon began cultivating seeds in Saxony-Anhalt and Brandenburg, processing them into organic, high quality edible oils.



Rafael Dulon and Hana Gabrielová, CEO at Czech-based Hempoint, with the MC HC 3400

HANF FARM GmbH

CEO: Rafael Dulon

Founded: 1997

Headquarters: Berlin

Profile: Vertically integrated industrial hemp grower; developer of hemp harvesting and processing technology; producer of a wide range of hemp food and other derivatives.

Down through the years Hanf Farm has expanded operations – first by working closely with local farmers to expand its growing area; the company's reach now extends to fields in eastern Germany and some Central European countries.

Leader in organic leaves, seeds

Along the way, the company also has expanded its product offerings, moving beyond edible oils into a wide range of teas, flour, protein powders, biscuits and hemp-seed chocolate bars, and raw materials for CBD production such as ground leaves, pellets and CBD-powder. Hanf Farm has extensive distribution around Europe and in several non-European

countries, Dulon said, and expects to be one of the largest producers of organic hemp leaves and seeds in 2017.

The fields from which Hanf Farm gets raw plant material are primarily in ecologically managed areas that produce organically grown crops – an environmentally friendly process that Hanf Farm takes seriously: The company was the first European hemp processor to receive certification for hemp seeds, leaves and flowers under the International Sustainability and Carbon Certification (ISCC-PLUS) regime, which it was granted in January 2016. The designation guarantees that the biomass is not produced on land with high biodiversity and high carbon storage.

"Our goal is the production of innovative and sustainable products with respect for ecological, social and economic aspects of agriculture and food production," says Dulon. "It was a logical step forward to have our products certified, as we are totally dedicated to agricultural good practices that demonstrate our commitment to the environment and to humanity in general."

Organic Hemp Leaf Powder



Hatcha

HATCHA®: Water-soluble micronized powder, rich in protein, vitamins, antioxidants and cannabinoids. Origin: organic agriculture in Germany. www.hanffarm.de

Multicombine HC 3400



Hemp harvest combine ideal for seed and leaves for tea and CBD production. We offer flexible solutions for your individual demands. www.multicombine.com

Setting the table

After hemp foods go legal, Australia poised for boom

After years of struggle and disappointment, hemp industry stakeholders in Australia and New Zealand have been served what they wanted all along: Legal hemp food markets.

With regulatory approval coming in late April, Australian producers gain access to a domestic market estimated at \$13 million based on seed and straw production. Estimates further indicate that demand for Australian grown hemp could quadruple over the next few years – with most of that coming from firms who entered the industry early, in the states of New South Wales, Victoria, Queensland and Tasmania. Expansion of the hemp foods and CBD sectors could be a significant contributor to such a massive jump.

A hemp battle won

The battle to get hemp food products on the market in Australia dates to 2002. Now that it's won, manufacturers in both countries will be able to legally produce and sell products containing low levels of THC, and foods from the hemp seed will be legal for human consumption beginning this November.

Ministers said some states and territories will need to amend their laws to clear a path for the industry, which is widely expected, and agreed to set up an Implementation and Monitoring working group on hemp.

“[This decision] will also contribute significantly toward more sustainable farming in Australia, with the added bonus of creating considerable job opportunities for Australia's farming industry,” said Paul Benhaim CEO at Bangalow, New South Wales-based Hemp Foods Australia (HFA) in the southeastern part of the country.

A 'rush' to hemp

HFA, which deals in hemp seeds, oil and protein, has expanded into four facilities in five years. It opened a state-of-the-art food processing plant last year under a government grant, strengthening its positioning for the coming Australian domestic food market. HFA received nearly \$600,000 from the Australian government to build the \$1.178 facility which it says will also help in its efforts to meet growing global demand, which HFA estimates at a total \$1.3 billion annually.

Benhaim's firm and others have had



Getting going down under

Four of six Australian states have active industrial hemp programs as the food markets in both Australia and New Zealand have opened up. Companies are already operating in New South Wales, Victoria, Queensland and Tasmania.

substantial seed contract business already in place but federal laws had forced those companies to work the export markets while being blocked from domestic sales.

“All over the world people are rushing into this industry, and Australia is missing out because our politicians are stuck in the 20th century,” New South Wales Greens party MP Jeremy Buckingham said in the days leading up to final government approval. He had criticized previous resistance to hemp-derived foods from health and police ministers in Victoria and New South Wales who raised concerns about hemp's interaction with road-side drug testing.

Consumer market primed

Benhaim said the Australian market is already primed, with consumers showing recognition and a positive attitude to towards hemp food products – such things as hemp seeds, hemp oil and hemp protein.

“This [attitude] has changed significantly since I first became involved in the industry in the early 1990's,” said Benhaim, who lobbied for years to make hemp legal as a food in Australia.

The government approval was also welcomed in the island state of Tasmania. “We've been arguing this decision was necessary to ensure the ongoing sustainability of the hemp industry in Tasmania. It's a giant step forward,” said Peter Skillern, CEO of The Tasmanian Farmers & Graziers Association. The state wants to build on its proven experience growing for medicinal products; Tasmania is licensed to grow poppies for pharmaceutical firms resulting in a \$290 million poppy industry.

Meanwhile, South Australia's Manufacturing and Innovation Ministry has signaled

it will add amendments to the state's Industrial Hemp Bill, which was introduced to Parliament by the Greens party last year. “It will allow farmers to consider whether they want to grow hemp in SA and to become licensed to do so,” SA Manufacturing and Innovation Minister Kyam Maher said.

The state will also create an Office of Medicinal Cannabis and Industrial Hemp to provide a single contact point for information and advice regarding those sectors.

In South Australia specifically, the new industrial hemp framework aims to combine industrial hemp and medicinal cannabis into one portfolio to create new opportunities for Australian companies across the food, fiber, and medical sectors.

“The opportunities for industry development of medicinal cannabis may also provide for high value jobs across the supply chain from research and development, growing, manufacturing, and transport and logistics,” Maher said.

NZ sees economics of hemp

While less developed, New Zealand hemp proponents see a scaling up of the crop to meet consumer demand and bring jobs and investment, said Mack McIntosh of the New Zealand Hemp Industries Association.

“The high value nutrition potential is massive; phenols to fragrances are available from this one arable crop and our farmers want access to the revenue streams from the whole plant, not just the seed,” McIntosh said. “The industry could be much bigger if we include the food and beverages produced from the 20% of the crop left in the field as leaf and flowering tops.”



A decade improving nature's greatest gift.

When international traders need high-quality hemp seeds, they turn to Canah. Through ten years of experience processing the seed of nature's greatest gift, we've grown into one of the world's largest and leading natural and organic food raw materials suppliers to major markets in Europe and North America.

As hemp continues its 21st century revival, the Canah brand has become Romania's international flagship, setting standards for superior service based on long-term business relationships with major hemp seed brands - and the innovators who are constantly expanding hemp's potential as a nutritional food.

Contact one of our hemp professionals to see how, together, we can create a healthier world.

THE CANAH EDGE

- ISO 22000/TUV Rheinland
- Organic certified
- Kosher certified



We are also the wholesaler and retailer of Canah branded organic and conventional hemp foods.

CANAH®
Excellence in hemp seed processing

IOSIF Vulcan 22
Salonta, Romania
415500 Romania
www.canah.com
(40) 259 373 336

BULK SUPPLIERS

- Hemp seed oil
- Shelled/hulled hemp seeds
- Protein powder
- Flour



A Hemp Manifesto for Africa

By ARNE VERHOEF • HEMPTODAY

Hemp could play a major role in achieving nearly every goal of the so-called “Africa 2063” manifesto, and serve in nearly every aspect of the ambitious Accelerated Industrial Development plan for Africa (AIDA), driven by the African Union and the United Nations. There is no better single crop to help modernize African agriculture and bring more industrialization to African economies than hemp, with its adaptability as a crop and its broad array of potential end products.

Hemp can empower the rural poor and address systemic poverty by including small scale producers into agronomic value chains, and through investing in the skills and resources needed to produce the crop. Its many ancillary industries can drive rapid economic advancement, creating jobs and ensuring inclusive economic participation.

Keeping Africa clean

The crop can address food security, increase climate resilience and minimise Africa’s carbon output, keeping it at the lowest in the world without halting progress. It can create carbon-sensitive infrastructure and dignified, healthy and eco-friendly housing for the millions living in shacks and shanty towns.

Because hemp is a perfect crop to address the critical challenges faced by the continent, it should be in the vanguard of efforts aimed at sustainable economic, social and environmental development.

Addressing the barriers

But in Africa, the barriers are significant:

The legislative challenges are immense, and a lot of grassroots work also still needs to be done to overcome rampant stigmas about cannabis in general, and to raise hemp’s profile on the continent. The potential of the crop escapes many everyday Africans. In some regions of Zimbabwe, for example, it’s believed that the plant’s seeds are poisonous. This in a country where malnutrition is relatively common due to protein-deficient diets, and where at least one native hemp variety produces an astounding amount of seed - potentially well-suited as seed

crop. The general population needs to be convinced of the plant’s benefits, not just know its religious or recreational use.

Ignorance often extends to the highest levels of officialdom. Our government leaders also need to understand the promise hemp holds. And then they need to develop legislative frameworks and government support programs to facilitate the creation of inclusive hemp value chains all over the continent. Needless to say, getting the rules for hemp right goes hand-in-hand with the need to eliminate cannabis prohibition generally, and reform our approach to this plant.

A ‘savior crop’?

Despite recent advances made in cannabis cultivation on the continent, there is no clear vision or strategy for positioning hemp as the “savior crop” it could be.

High entry barriers such as exorbitant licensing fees promote big-scale, commercial growing that attracts foreign investment but excludes traditional cannabis-growing communities that have historically suffered most from cannabis prohibition.

On the other hand, focusing only on using the crop to empower the rural poor will exclude commercial players, which are needed to achieve economies of scale, build the required infrastructure, drive innovation and open the market.

An Afro-centric strategy

What is needed to realize the potential of hemp in Africa is a combined, multilateral effort where



About the Author

Arne Verhoef is Managing Editor of HempToday. A trained biologist, horticulturist and developer of health products based on CBD hemp and other healing plants, he also manages The Stokvel Collective, a Community Supported Agriculture project that seeks to spread regenerative agriculture through grassroots action.



AFRICA

governments, policy makers, advocates, researchers, farmers and other stakeholders come together to formulate strategies that promote the hemp industry in an Afro-centric way.

With strong institutional leadership and a population awakened to the benefits of the crop and its countless products, honorable collaboration and policies based on sustainable development, social welfare and regenerative resources, hemp can emerge as a powerful tool in addressing the challenges of the continent.

Despite its many challenges, Africa has a unique opportunity: To leapfrog into the 21st century, adopting future-oriented development strategies while avoiding the mistakes and pitfalls of the “developed world” – from negative social outcomes to high environmental costs due to carbon-intensive industries and dirty technologies.

Hemp, along with a select few other crops, can turn Africa into a global leader in the a bio-based economy focused on intelligent agriculture and regenerative resources, social progress and green innovation. Hemp can, if we have the vision and make the effort, be the flagship that sails Africa into the 21st century.

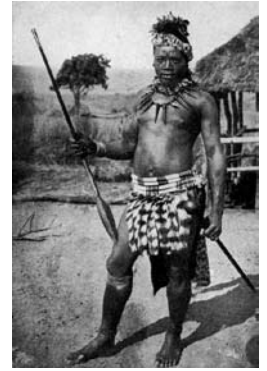
A continental strategy

With strong institutional leadership, hemp can emerge as a powerful tool in addressing the challenges of the African continent. A successful strategy will:

- Require strong institutional support and leadership
- Drive broad legislative rehabilitation, including legislative protection of “savior crop” status
- Find solutions suited to the African context, e.g. modular/mobile processing equipment, cooperative production.
- Prioritize empowerment of women and youth
- Incorporate and protect needs and markets of both small-scale and commercial actors.
- Protect the genetic resources of African Cannabis
- Identify regions well-suited to production of industrial Cannabis, invest in infrastructure and agronomic support
- Pinpoint rewarding end products to focus on such as Canada did by putting their focus on seed
- Foster agricultural research, such as genetic improvement and selective breeding for desired traits
- Incentivize industrial uses of Cannabis products through funding research, subsidies, technical support, industry incubators and innovation hubs
- Deregulate small scale production and cooperative models, and regulate commercial activity
- Coordinate multilateral training, skills and knowledge transfer, awareness and education campaigns.

– AV

HISTORY



Cannabis: Choice of the Zulu warrior

In areas of Kwazulu Natal, it's recorded that the Zulu men smoked cannabis for hunger suppression and battle readiness, an interesting anecdote on the effects of Tetrahydrocannabinol, a cannabinoid predominant in certain southern African cannabis landraces.

Cannabis Sativa -- hemp -- is nothing new to Africa and was no doubt among the many forms of cannabis introduced to the continent at different times throughout history; many believe it was first brought here by Arab traders.

While a full account of cannabis in Africa is difficult to recreate -- with much of the history destroyed, lost or mystified -- we do know that recreational and religious use of cannabis has been and always will be widespread; likewise the incorporation of the plant into indigenous medicine systems and rituals.

Cannabis has a long history in as healing agent in Africa, with records showing its traditional use in treating asthma, bronchitis, headaches and migraines, labor pains, epilepsy, colds, flu, sleeplessness, diabetes and even hair growth.

– AV

South Africa: A cautionary tale

Despite starting research trials on the agronomic feasibility of hemp between 1994 and 1996 when the South African government started growing cannabis to make the THC isomer Dronabinol for the United States, South Africa has yet to properly legislate for hemp cultivation and use.

A study done by Camila Coogan, “The South African hemp story: Saviour Crop or Business as Usual?” details some of the trials and tribulations that has plagued the South African hemp industry. Many of the challenges stem from legislative barriers, while others stem from bad politics, differing stakeholder priorities and lack of any clear vision or consolidated efforts for a viable hemp industry.

Advocates, activists and commercial interests are challenging the lack of progress, and uniquely, cannabis prohibition is being challenged as unconstitutional and in violation of human-rights in SA courts. Meanwhile private stakeholders continue to advocate for legalization or de-regulation of cannabis, and are working to establish a hemp industry despite the legal and political challenges. A Cannabis Development Council of South Africa formed in late 2017 aims to facilitate industry growth.

The South African experience through 20 years can provide valuable insight to other countries on pitfalls and policy approaches to avoid as they slowly wake up to the potential of the crop:

MALAWI: In 2015 Malawi announced their trials on hemp, with promising results and enthusiastic reports on their findings and progress filtering through. One

private company, Invegrow, has reported successful croppings of hemp seed varieties, and foresees a bright future for agricultural production in the country. Malawi is quickly set to become a voice in industrial hemp for the continent.

ZIMBABWE: The government recently rolled out a program for medical cannabis and hemp production which includes research trials. Permits for commercial growing, costing \$50,000, brought the government more than \$7 million in application fees in the two weeks following the announcement. Three weeks later, however, the government started back-peddling, putting licenses on hold until “feasibility studies” could be performed and to sort out a legislative framework.

DR CONGO: While the country is mired in conflict, it is also a large producer of cannabis. Details are difficult to come by, but commercial operations to produce cannabis (for export) are already underway. Revenue and biomass from cannabis can go a long way in rebuilding the country.

MOROCCO: Africa produces the most cannabis in the world, according to most sources. In Morocco's Rif region, where a world famous landrace has been growing for hundreds of years, advocates are turning to the impressive amount of stalks produced as by-product (some 8,000 tons annually) for building houses and to develop local economies in the region.

LESOTHO: Cannabis has been the primary cash-crop of the tiny mountain kingdom of Lesotho for many decades. It has taken steps towards formalization of this market, issuing a medical cannabis licence to a South African company. – AV

Specialists in communications for the industrial hemp industry



PHOTO: ATTILA HUSSEJNOW

Web Design & Development

- Site structuring and setup
- Graphic design
- Search Engine Optimization
- Custom content
- Social media marketing
- Training & site maintenance

Film & Photography Services

- Corporate videos
- Exclusive industry stock photos
- Corporate photography & portraits
- Product photography
- Photo retouching

Print Design & Branding

- Brochures
- Business cards
- Publication design
- Visual ID
- Editorial placement

Flexible plans, reasonable prices
Contact us for a free consultation



www.mprstudio.com • (48) 574 536 217 • marshall@mprstudio.com

Let's plant hemp all over the planet Earth!

100% hemp T-shirt

happy environment

happy economy

love from