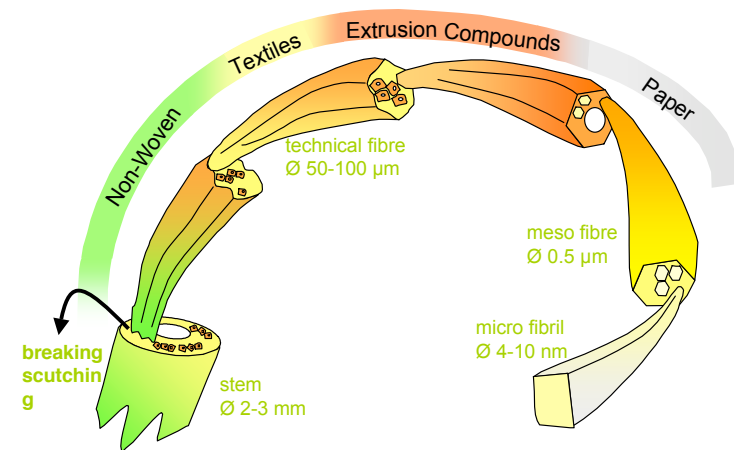


Overview of the European Natural Fibre Industry: Cultivation, processing, and product lines

Dipl.-Phys. Michael Karus
Coordinator of the
„European Industrial Hemp Association (EIHA)“ and
managing director of nova-Institut (Germany)

Agrofibre structure

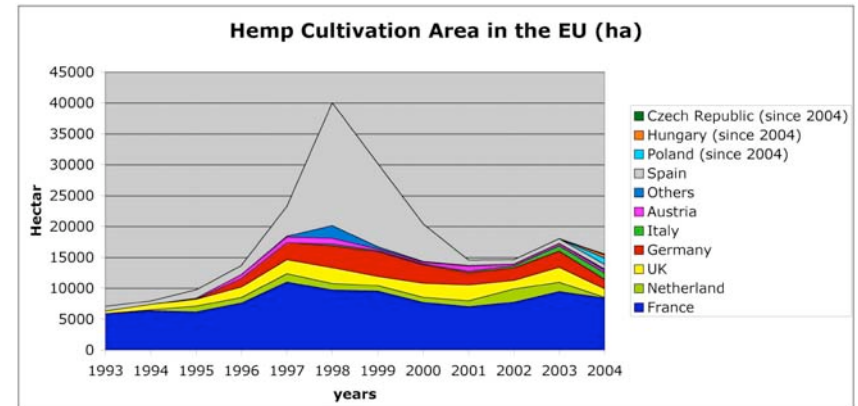
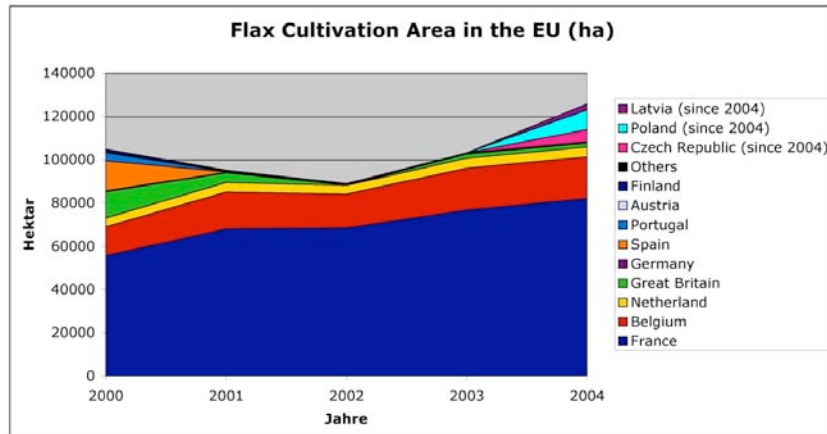


Weltproduktion von Bastfasern (in 1.000 t) laut FAO 2003 (www.fao.org)

Naturfaser	2000	2001	Wichtigste Anbaugelände
Jute	2.650	2.710	Indien, Bangladesch
Kokosfaser / coir	664	654	Indien, Sri Lanka
Flachs / flax	588	636	China, Europa
Kenaf	384	396	Indien, China
Sisal	353	336	Brasilien
Abaca	104	104	Philippinen, Ecuador
Hanf / hemp	55	55	China, Europa
Agave	54	54	Kolumbien
Summe	4.852	4.945	

Can we trust the FAO data?

Cultivation area in the EU	Source: EU	Source: FAO	Source: EU	Source: FAO	"hemp fibre and tow"	"hemp seeds"
Year 2002 (Hectar)	Flax	Flax	Hemp	Hemp Total		
Frankreich / France	68.416	75.225	7.729	6.508	208	6.300
Belgien / Belgium	15.567	0	0	0	0	0
Niederlande / Netherlands	4.000	4.461	2.100	0	0	0
Großbritannien / UK	156	18.000	1.413	0	0	0
Germany / Deutschland	299	0	2.035	0	0	0
Spanien / Spain	60	15.000	691	11.003	11.000	3
Portugal	0	0	0	0	0	0
Austria / Österreich	154	0	277	0	0	0
Finnland / Finland	202	0	0	0	0	0
Schweden / Sweden	25	0	0	0	0	0
Dänemark / Denmark	0	0	0	0	0	0
Italien / Italy	0	3.000	300	296	296	0
Sonstige / Others	6	0	39	0	0	0
EU total / gesamt	88.885	115.686	14.584	17.807	11.504	6.303



European Policies - subsidies

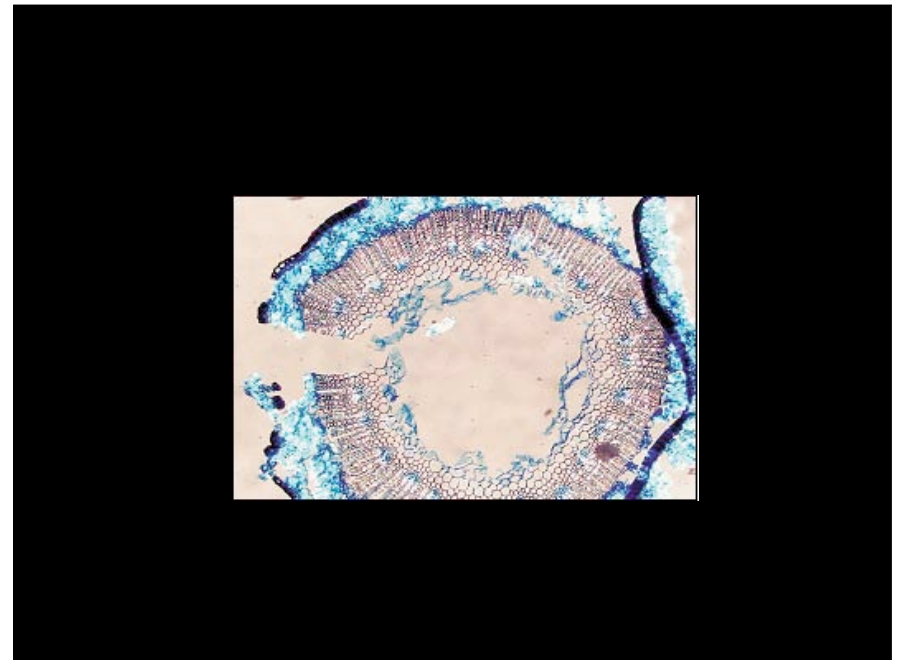
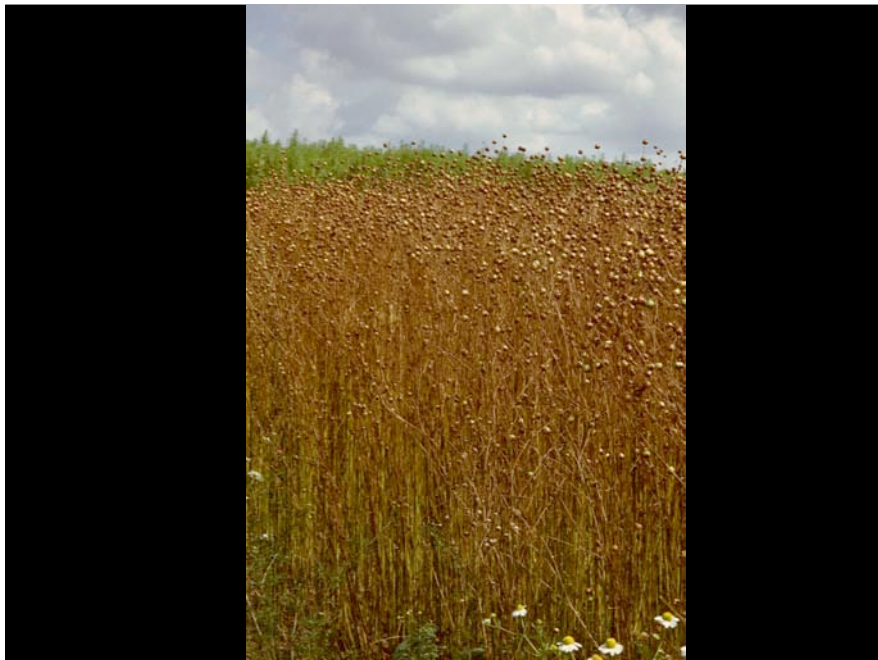
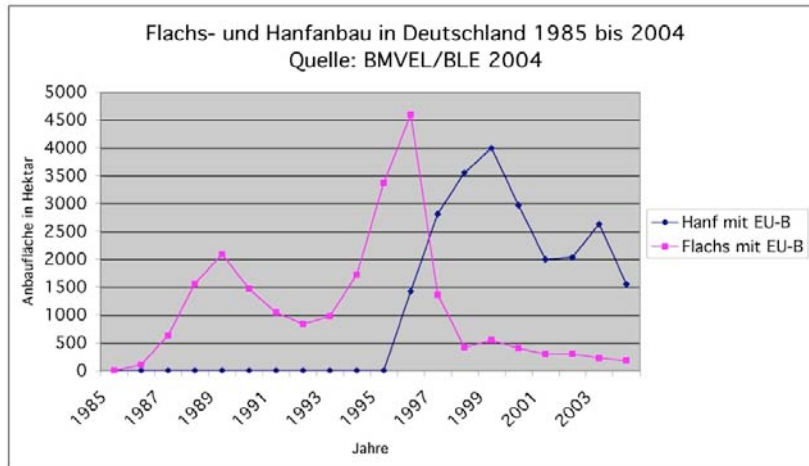
Cultivation area subsidy („Grand Culture“) ca. 350 EUR/ha

Fibre processing subsidy for flax short fibre & hemp fibre 90 EUR/t

Germany
Market introduction program for renewable raw material insulation
30 - 40 EUR pro m³

Main applications of flax and hemp fibres, produced in the EU in 1999 (flax) and 2002 (hemp)

Product line	Flax short fibres	Hemp fibres
Pulp & Paper	45%	80%
Composites (auto)	6%	15%
Building and insulation materials	2%	4,5%
Geo- and agrotextiles	0,5%	<1%
Apparel and houseware textiles	20%	0%
Traditional applications (ropes...)	2%	<1%
Export to Non-EU countries	24.5%	<1%
Total	60,000-70,000 t	22,000-25,000 t





The **European Industrial Hemp Association (EIHA)** was „founded“ in Wolfsburg on 14.09.2000 at the international conference **BIORESOURCE HEMP 2000**

EIHA members 2004:

- **AGRO-Dienst (D)** since 2000
- **BaFa (D)** since 2000
- **FIBRANOVA (I)** since 2003
- **Hemcore Ltd (UK)** since 2000
- **HempFlax B.V. (NL)** since 2000
- **LCDA (F)** since 2000
- **Yunnan Industries (China)** since 2004 (associated member)

Coordinators:

Michael Karus (D), nova-Institut

Francois Desanlis (F), hemp farmer & consultant

Official foundation: TODAY! (22:00)

www.EIHA.org



EIHA 2002, Hürth

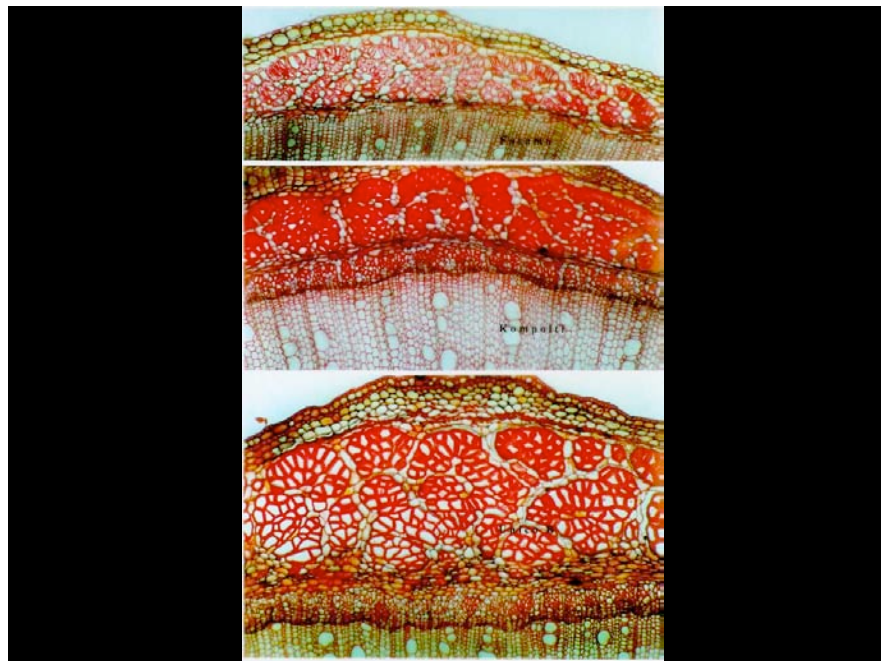
Aims of the EIHA are

- to establish a regular exchange of information between the member companies
- to promote EIHA as a contact partner for EU institutions and national ministries
- to encourage the exchange of information between the national ministries concerning EU-policy
- to give industrial partners easy access to the European Hemp Industry via EIHA-homepage
- to collect and publish datas about the European Natural Fibres Industry.

www.EIHA.org







Database

- **Hemcore Ltd (UK)** **EIHA member**
- **HempFlax B.V. (NL)** **EIHA member**
- (Hempron B.V. (NL) -> HempFlax)
- **LCDA (F)** **EIHA member**
- **AGRO-Dienst (D)** **EIHA member**
- **BaFa (D)** **EIHA member**
- (Vernaro (D) -> HempFlax)

These companies represent a market share of 70 - 80% in terms of fibre produced in the EU.

www.EIHA.org

Basic facts 2003

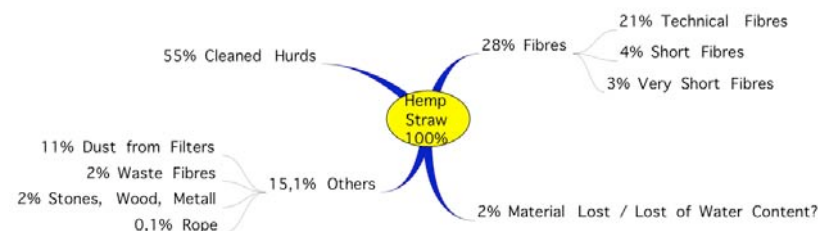
Cultivation area of the EIHA companies **12.340 ha**

Average yield of dry hemp stalks (2001 & 2002 & 2003) **5.3 - 6.2 t/ha**

Production

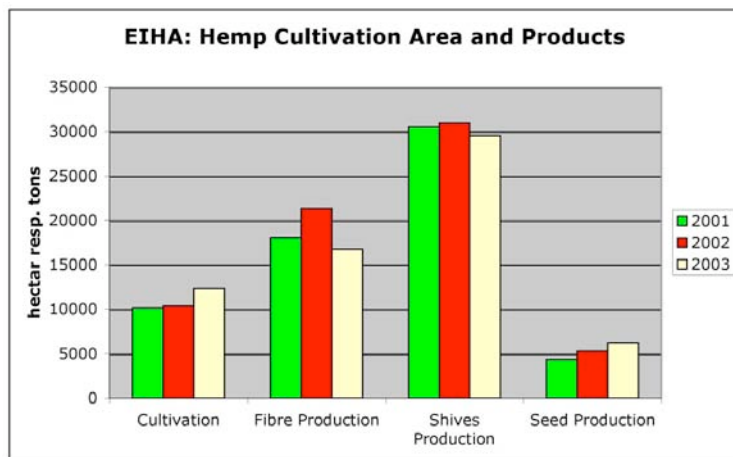
- **Fibres** **17.000 t**
- **Hurds - Shives** **30.000 t**
- **Seeds - Nuts** **6.200 t**

Hemp Straw Material Flow

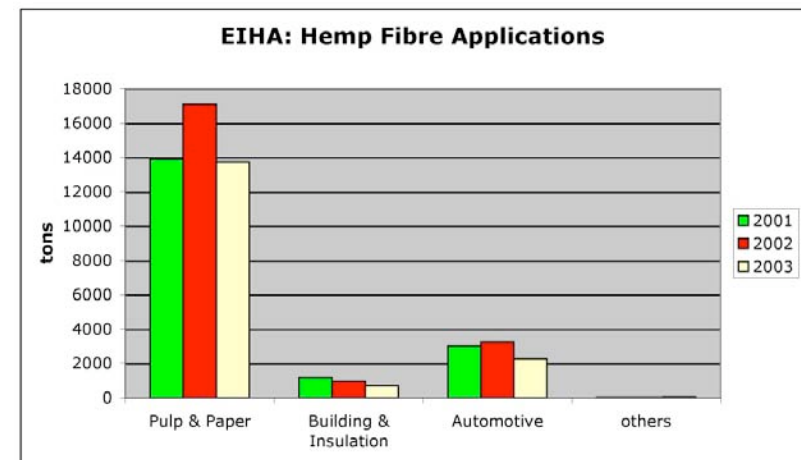


2003

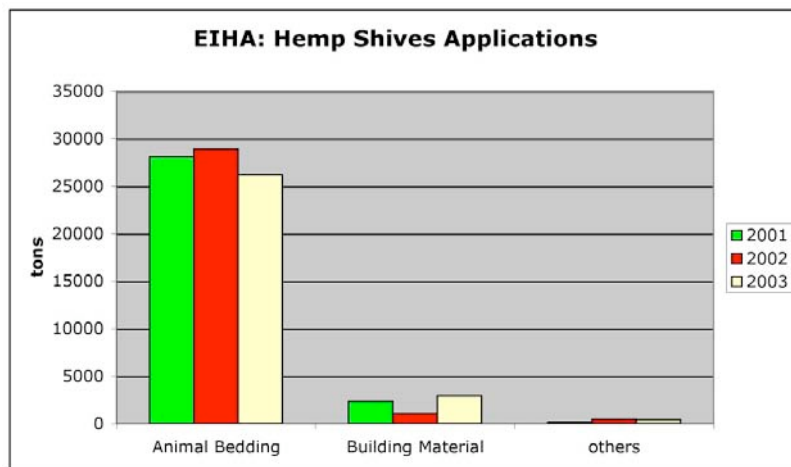
www.EIHA.org



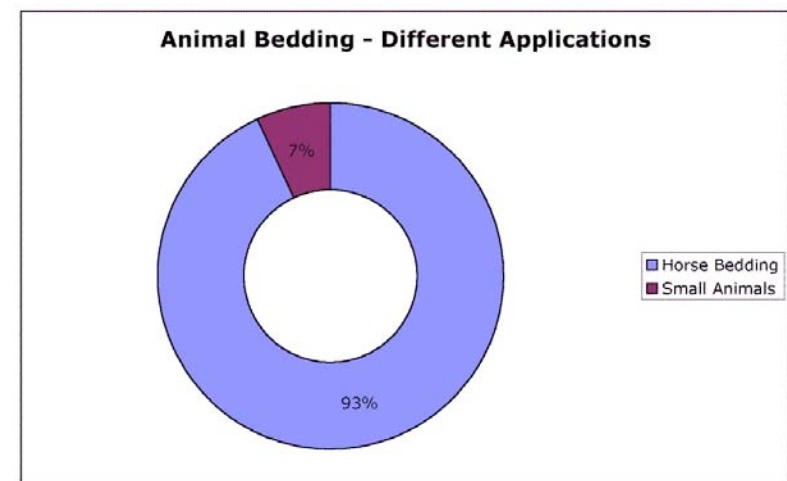
www.EIHA.org



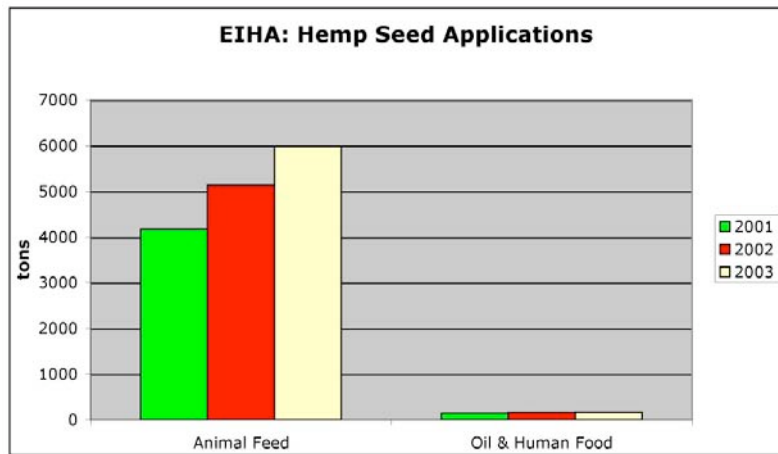
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