



Welcome to the

**Third International Conference of the
European Industrial Hemp Association (EIHA)**

Welcome

70 - 80 participants from 14 different countries

www.EIHA.org

www.nova-institut.de

**Overview on 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)**



NACHWACHSENDE ROHSTOFFE



Marktforschung

Ökonomische Analysen

Machbarkeitsstudien

Industrie- und Politikberatung

Projektentwicklung und -management

Experten-Netzwerk Technik NR-Werkstoffe

Content-Management-Systeme

Kongress-Management

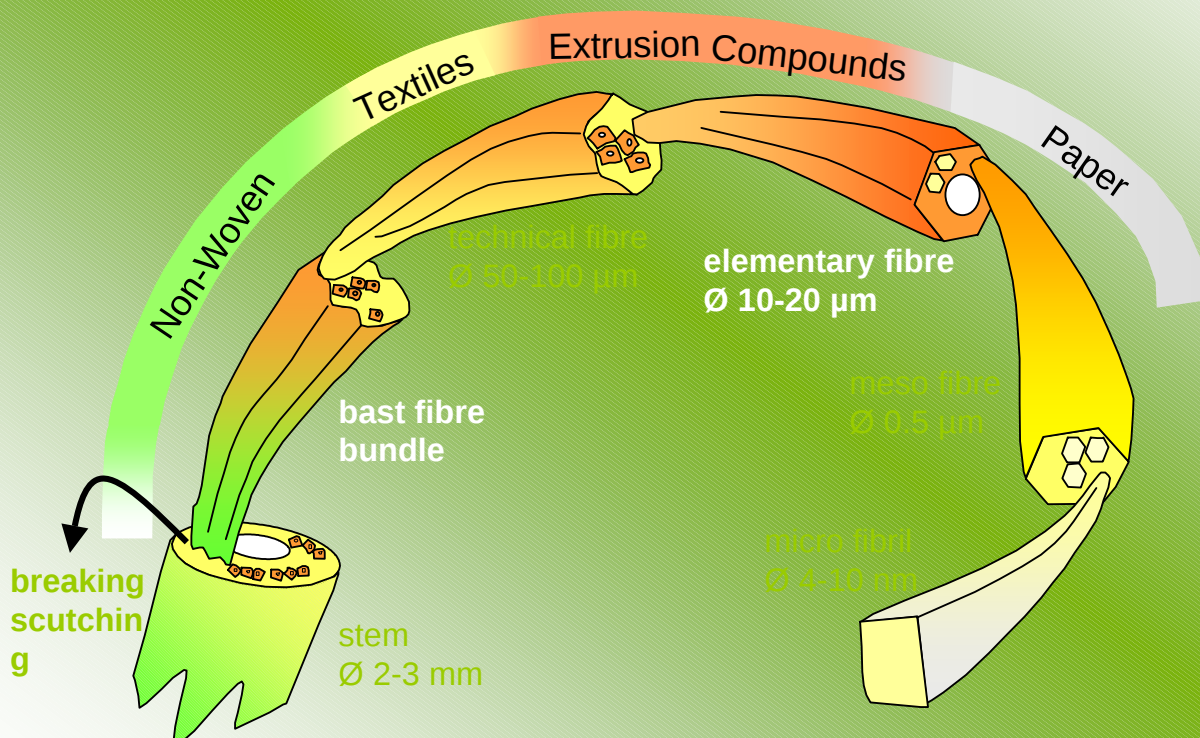
Informations-Portale

www.nova-institut.de

www.nachwachsende-rohstoffe.info
Das Nachrichten-Portal
für stoffliche und energetische Nutzung



Agrofibre structure



www.EIHA.org

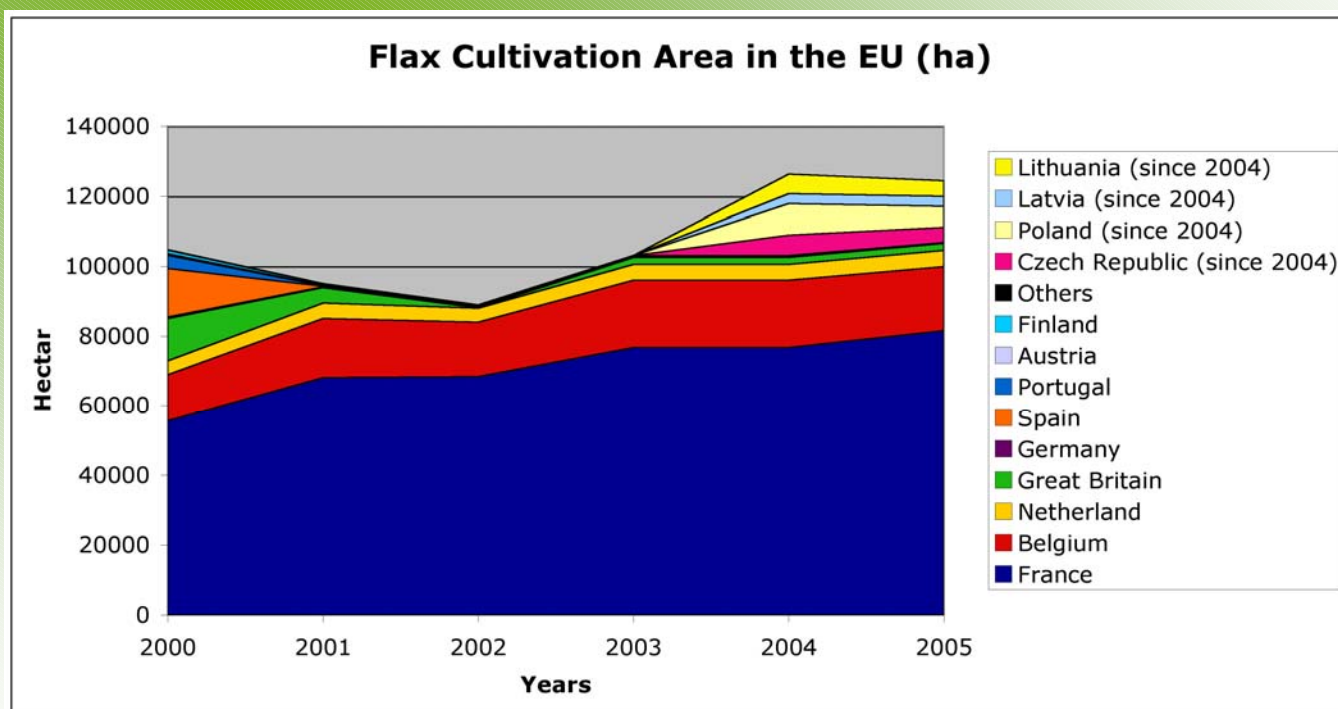
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World Production Natural Fibres (FAO 2005)

Natural Fibres (except cotton)	Production in 2003 (in Metric t)	Production in 2004 (in Metric t)	Main Countries
Jute	2,840,000	2,861,000	India, Bangladesh
Coir	929,000	931,000	India, Viet Nam, Sri Lanka
Flax	748,000	782,000	China, Europe
Kenaf & Jute-like	374,000	403,000	India, China
Sisal	309,000	315,000	Brazil, Kenya
Ramie	249,000	249,000	China
Abaca	98,000	98,000	Philippines, Ecuador
Hemp	69,000	66,000	China, Europe
Agave	56,000	56,000	Columbia, Cuba, Mexico
Total	5,672,000	5,761,000	

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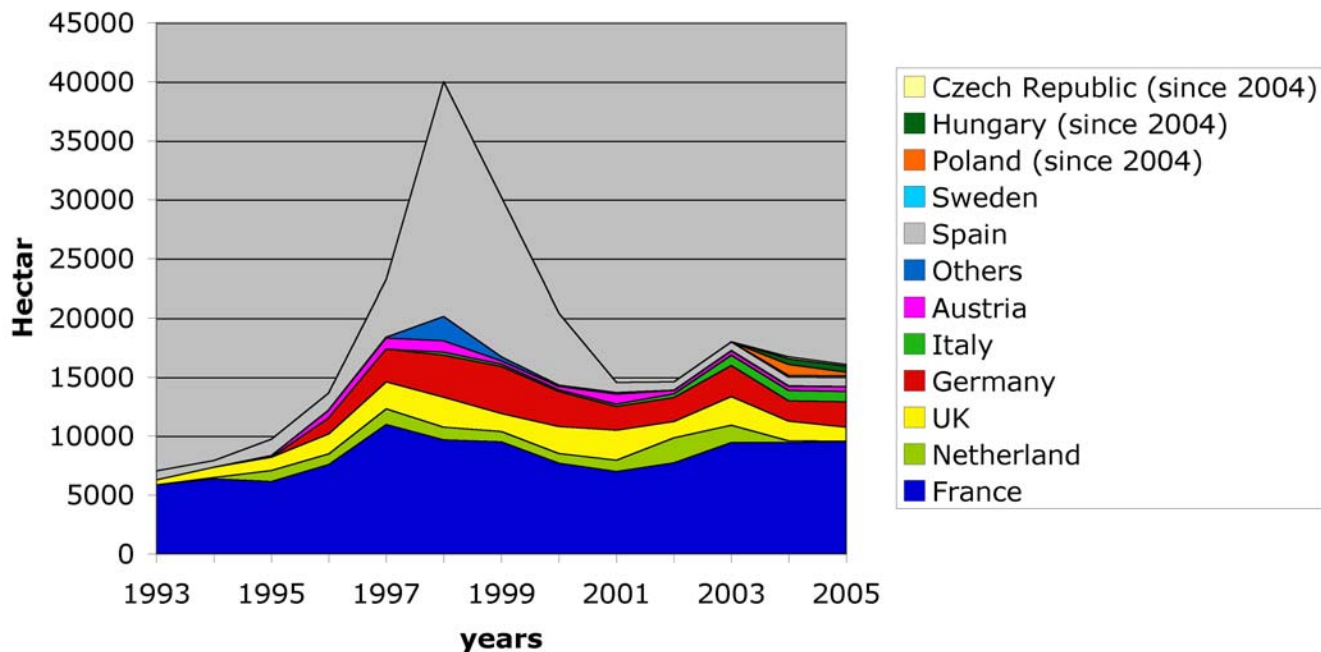
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Hemp Cultivation Area in the EU (ha)

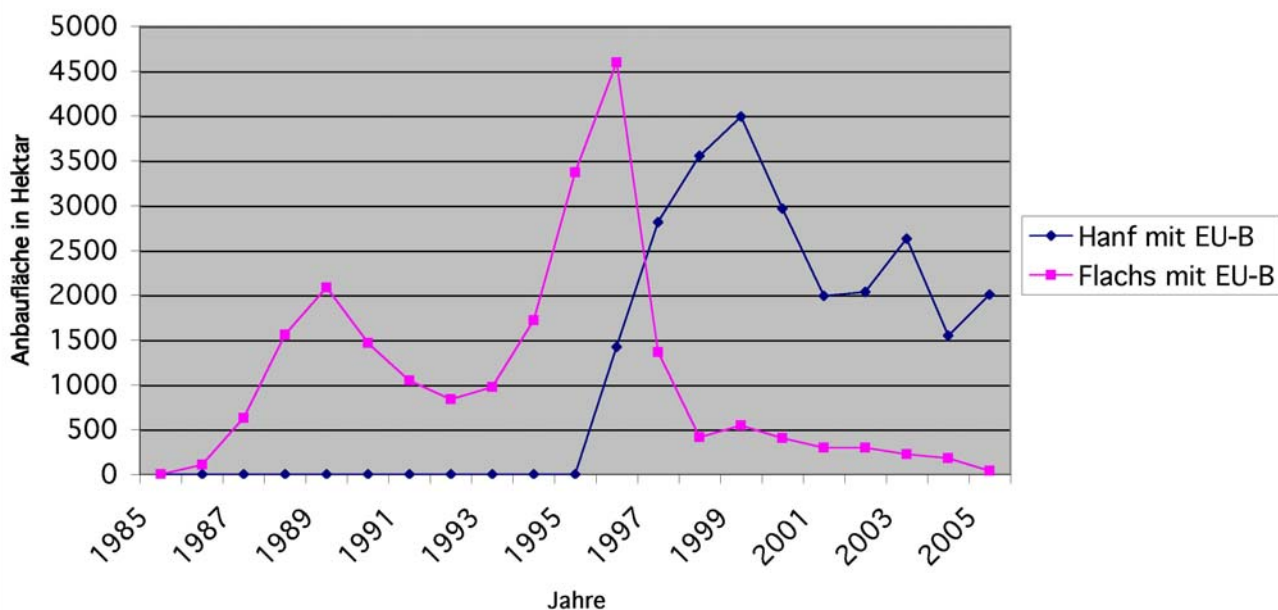


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Flachs- und Hanfanbau in Deutschland 1985 bis 2005 .

Quelle: BMVEL/BLE 1985 - 2005



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European Policies - subsidies

Cultivation area subsidy („Grand Culture“) 300 - 350 EUR/ha

Fibre processing subsidy for flax long fibre 200 EUR/t (until ??)

Fibre processing subsidy for flax short fibre (tow) & hemp fibre 90 EUR/t (2006/07 ??)

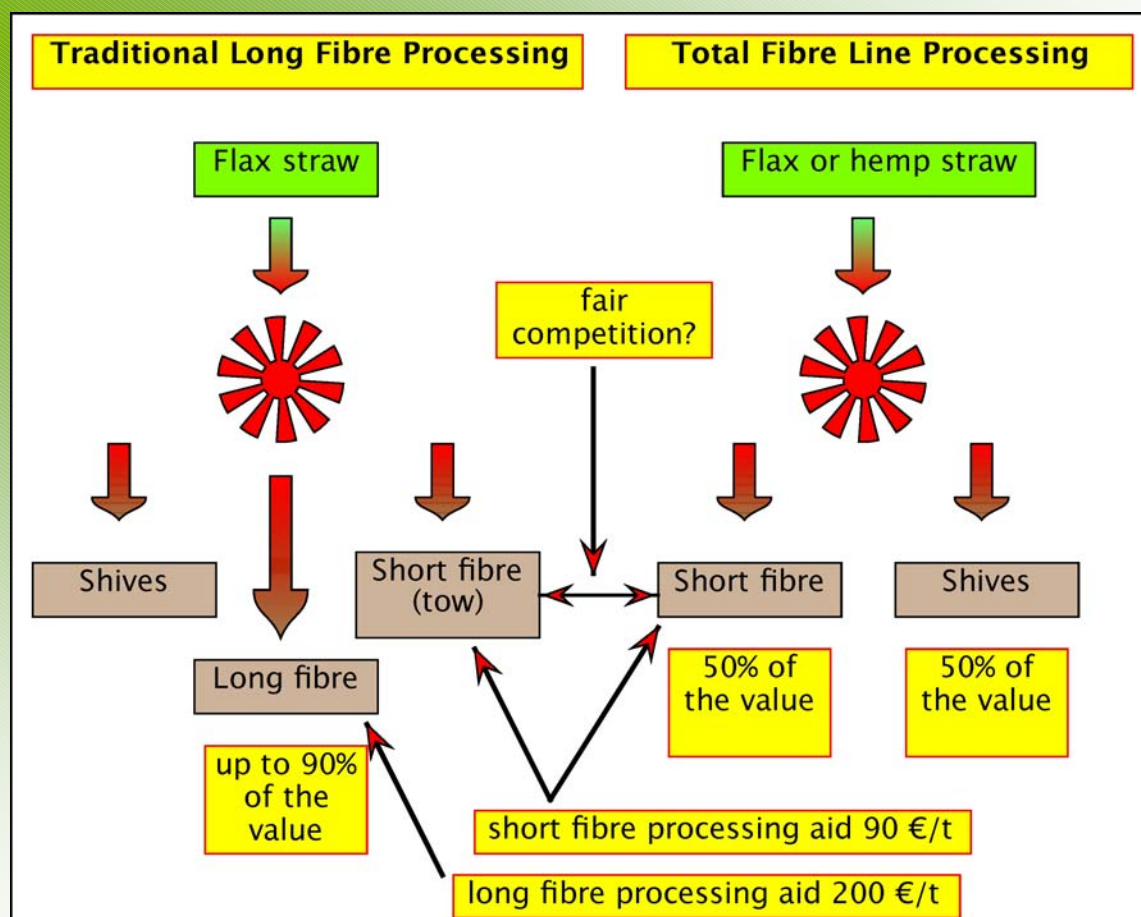
Germany

Market introduction program for renewable raw material insulation

25 - 35 EUR pro m³

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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%
Apparal 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

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Sales realised for each of the four outlets of flax and hemp fibres in 2003 (ANDI, Ernst & Young 2005)

Natural Fibre / Outlet	Volume (t)	Price (€/t)	Sales (Mio. €)	%
Flax				
Textiles long fibres	115,321	1,593	183.7	88.7
Textiles short fibres	29,500	345	10.1	4.9
Special & technical paper	25,000	170	4.2	2.0
Non-wovens (insulation ...)	1,850	400	0.7	0.3
Composites	17,000	500	8.5	4.1
Flax total	188,671	-	207.2	100
Hemp				
Special & technical paper	20,706	371	7.7	82.8
Non-wovens (insulation ...)	824	500	0.4	4.3
Composites	2,470	500	1.2	12.9
Hemp total	24,000	-	9.3	100

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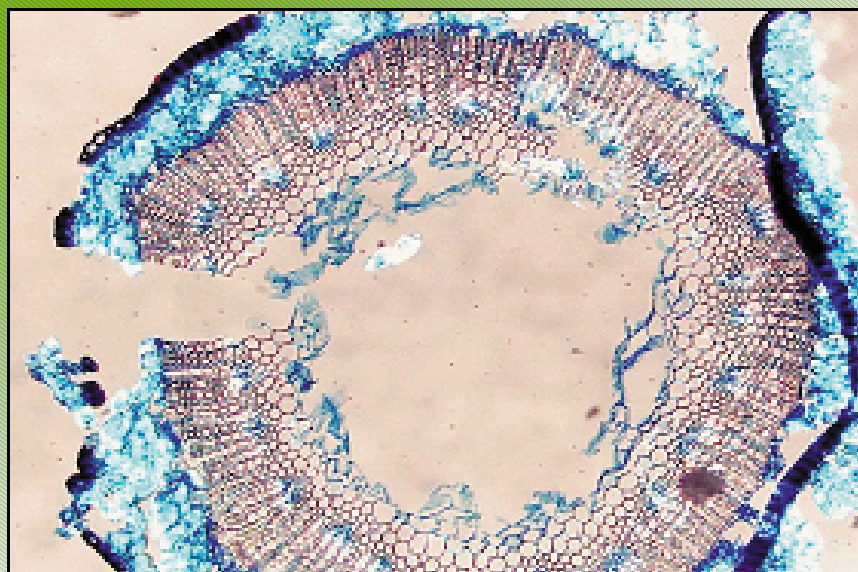
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The **European Industrial Hemp Association (EIHA)** was founded
-> Wolfsburg on 14.09.2000 at the international conference
 BIORESOURCE HEMP 2000 (informal association)

-> Hürth on 23.11.2005 as an official association
 (Country Court Brühl, VR 1397)

EIHA members - founding members 2005

- | | |
|---|-----------------------------------|
| • NAFGO GmbH (D) | since 2000 |
| • BaFa GmbH (D) | since 2000 |
| • FIBRANOVA (I) | since 2003 |
| • Hemcore Ltd (UK) | since 2000 |
| • HempFlax B.V. (NL) | since 2000 |
| • HempFlax Deutschland GmbH (D) | since 2004 |
| • LCDA (F) | 2000 - 2004 |
| • HAV NafiTech GmbH & Co. KG (D) | since 2005 |
| • Yunnan Industries (China) | since 2004
(associated member) |

Coordinators:

Michael Karus (D), nova-Institut

Francois Desanlis (F), hemp farmer & consultant www.EIHA.org

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The European Industrial Hemp Association (EIHA)

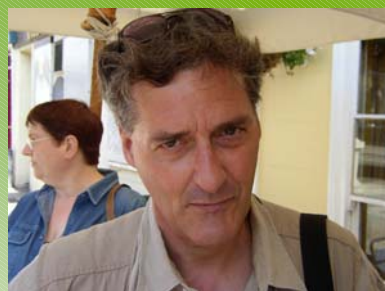
Board of Directors

- Chairperson: John Hobson, Hemcore Ltd. (UK)
- First Deputy Chair: Cesare Tofani, Fibranova (Italy)
- Second Deputy Chair: Bernd Frank, BaFa GmbH (Germany)

Executive committee, executive director: nova-Institut GmbH, Michael Karus



Wolfsburg, 2000



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The "European Industrial Hemp Association (EIHA)" regards itself as an informal conjunction of hemp primary processing companies within the EU.



EIHA 2002, Hürth

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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.**

You can join EIHA now! Application form available!

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www.EIHA.org



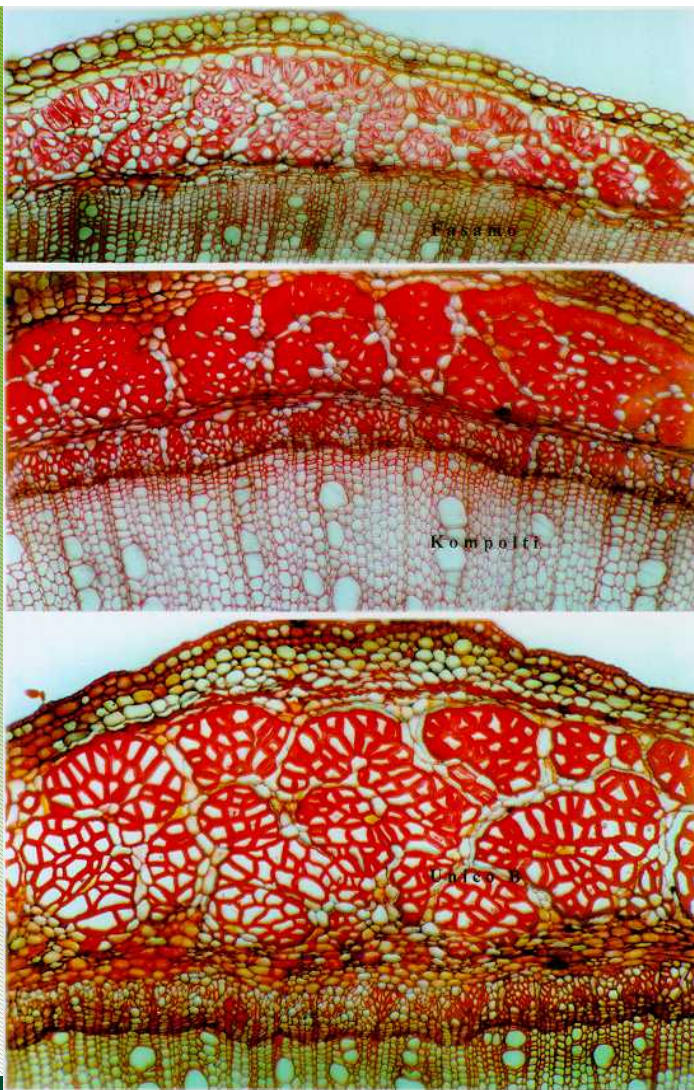
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Database in 2003

- | | |
|-----------------|---------------|
| • Hemcore (UK) | • EIHA member |
| • HempFlax (NL) | • EIHA member |
| • (Hempron (NL) | -> HempFlax) |
| • LCDA (F) | • EIHA member |
| • NAFGO (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.

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Basic facts 2003

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

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

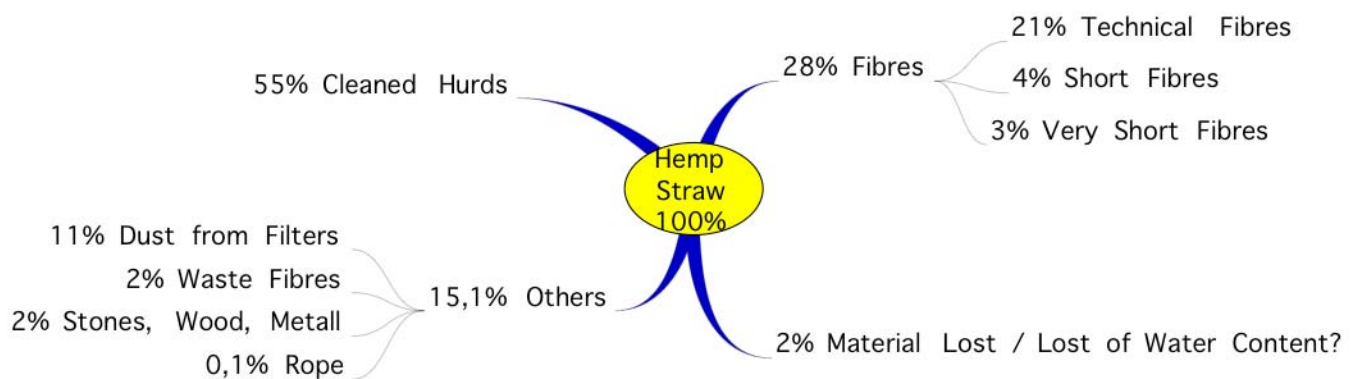
Production

- **Fibres** **20.500 t**
- **Hurds - Shives** **30.000 t**
- **Seeds - Nuts** **6.200 t**

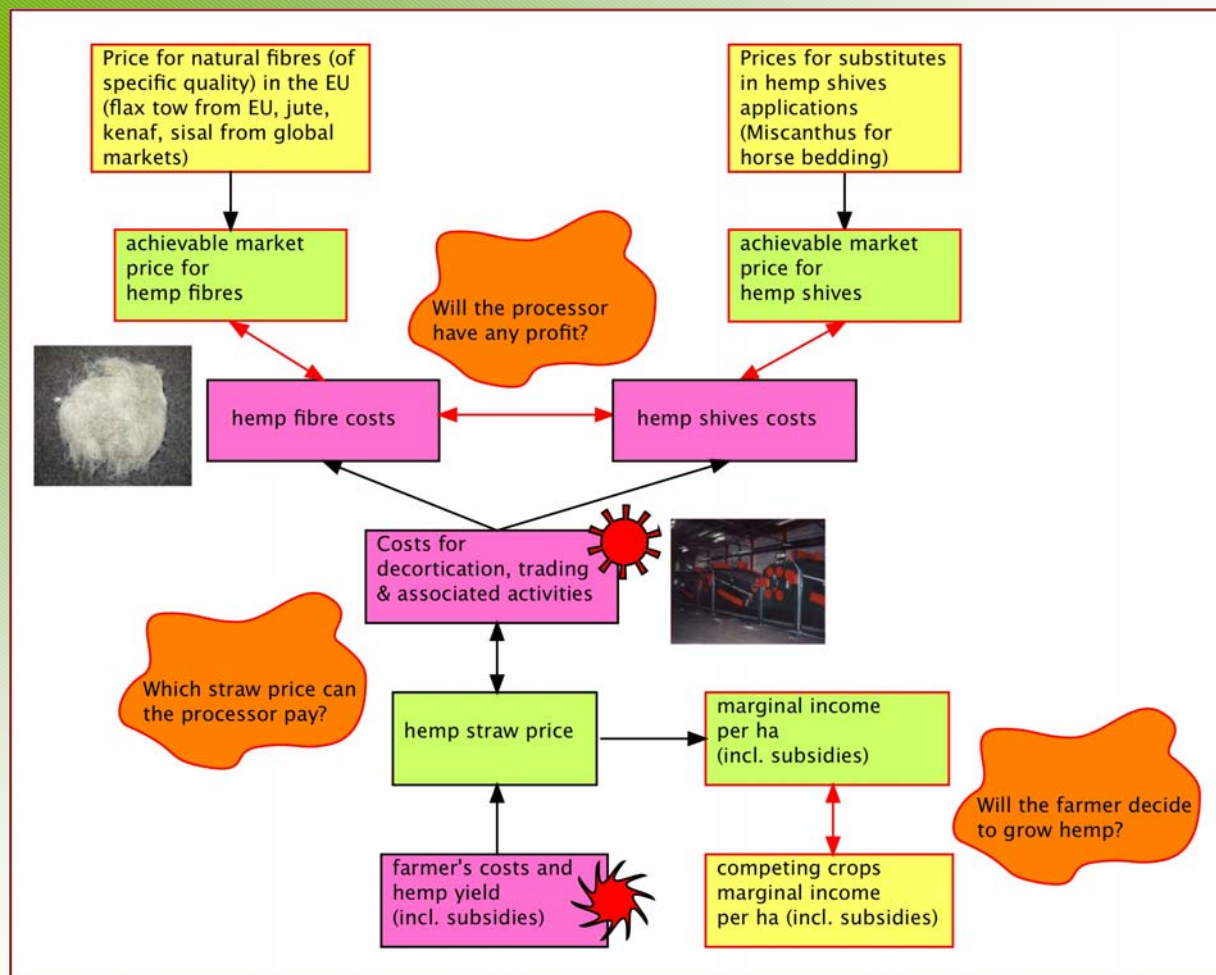
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Hemp Straw Material Flow



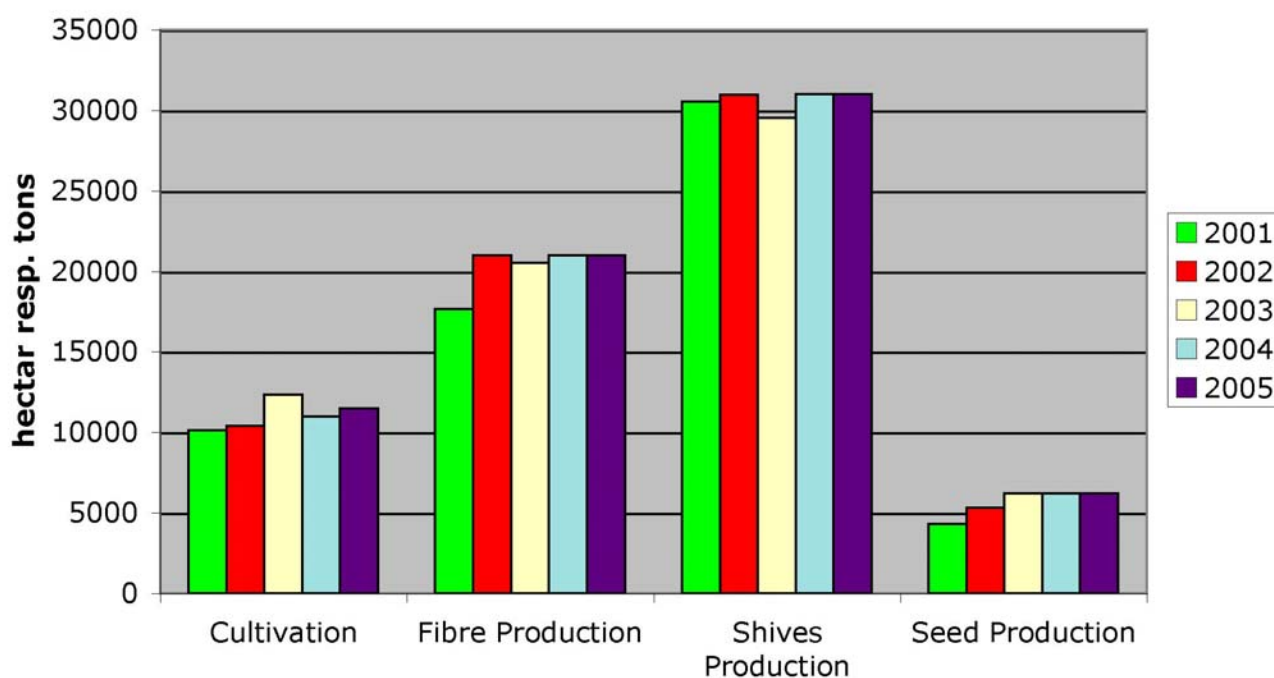
2003



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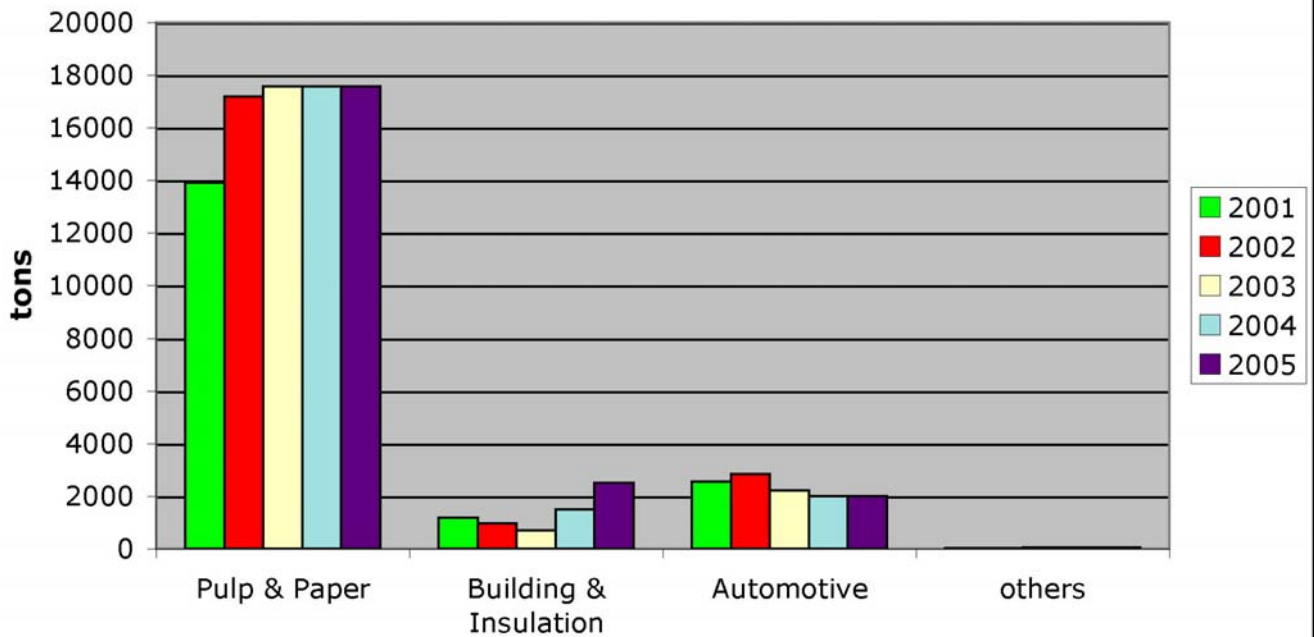
EIHA: Hemp Cultivation Area and Products



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EIHA: Hemp Fibre Applications



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Applications



Mercedes-Benz A Class



New Mercedes-Benz S Class

www.EIHA.org

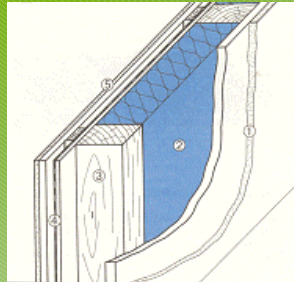
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Natural Fibres in Construction

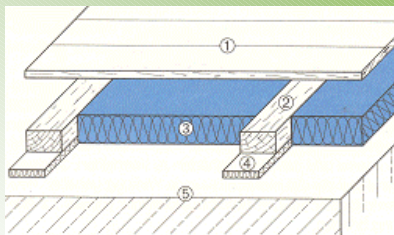


- Wall

- Insulation



- Clay construction

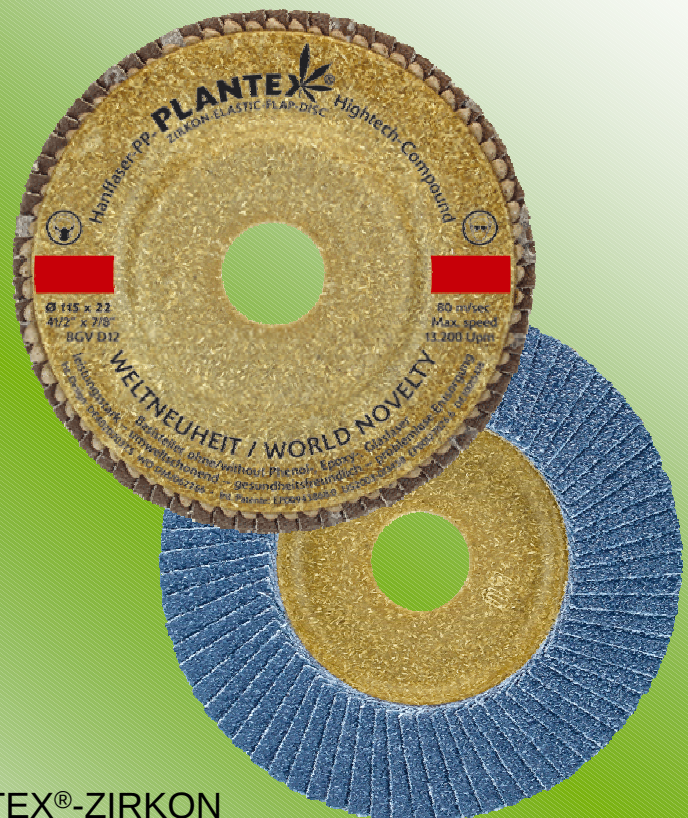


- Floor

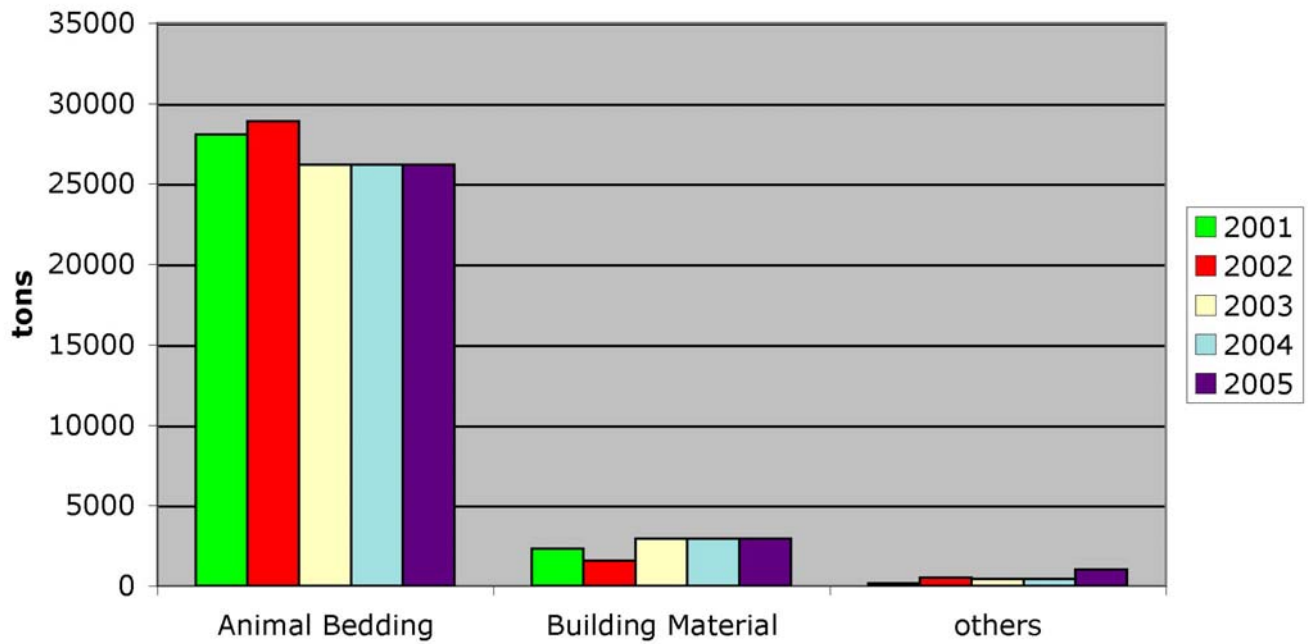


New applications

- Executive case

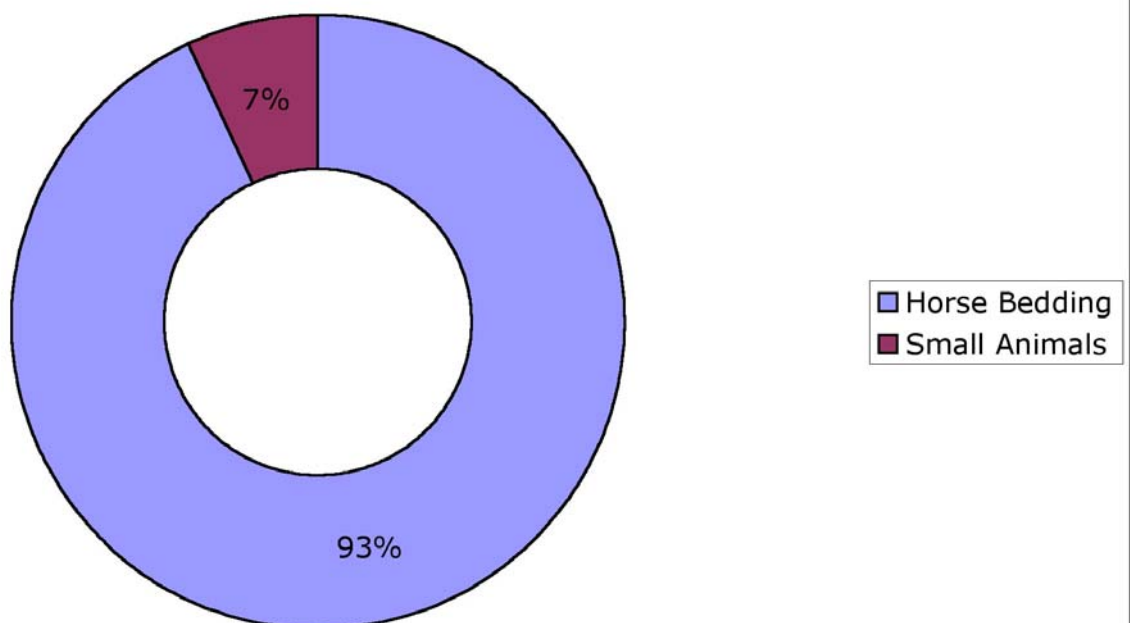


- PLANTEX®-ZIRKON
flexible flap disc



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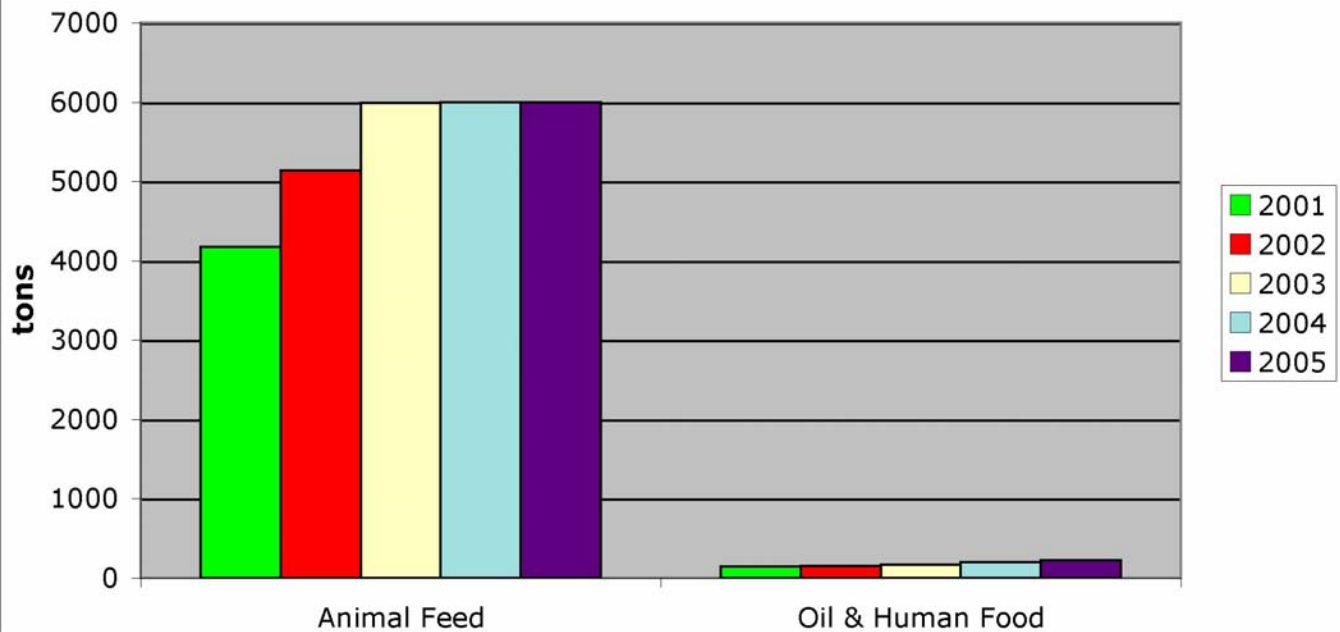
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EIHA: Hemp Seed Applications



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The European Industrial Hemp Association (EIHA)

We wish You an interesting and exciting conference!



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