

**4th International Conference of the  
European Industrial Hemp Association (EIHA)**

**Hemp seed as basis for nutrition  
and foodstuff in Europe**

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Hempro International

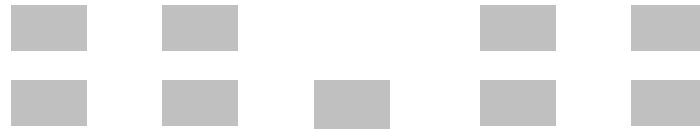
(Germany)

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## **Main Statement:**

The turnover with hemp foodstuff and corresponding raw material is rising. Hemp seed, hulled hemp nut, hemp oil and hemp press cake are becoming more presentable – both in retail as well as the food industry.

# Hemp International



Hanfhaus  
Onlineshop

- Textiles
- Accessoires
- Cosmetics
- Food



B2B  
Wholesale



Raw material

- Hemp seed
- Hulled hemp seed
- Hemp oil
- Hemp presscake

## **Hemp seed advantages – Combination of nut and oilseed:**

### **+ Rich in polyunsaturated fatty acids:**

- Supplier of omega-3 fatty acids in form of alpha linolenic acid
- Supplier of omega-6 fatty acids in form of gamma linolenic acid
- ➔ Helpful with illnesses metabolic and cardiovascular ailments

### **+ Rich in protein:**

- Includes eight essential amino acids
- Gluten-free
- ➔ Contributes to a healthy immune system and is easily digestible, even for consumers with digestion insufficiencies (Celiac disease)

### **+ GMO-free:**

- Free of Genetically Modified Organisms
- ➔ Eco-friendly food source

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## **Hemp foodstuff:**

- **Hemp seeds**
- **Hulled hemp seeds → hemp nuts**
  - **Hemp seed bars → bakery products → cereals, etc.**
- **Hemp oil → capsules**
- **Hemp presscake → protein powder**
- **Hemp tea**

## Hemp foodstuffs: Examples Germany



## Examples Canada



## Comparison of market volume for hemp (1):

### - Status Germany:

- Problem: no actual statistics for hemp seed used as raw material  
Estimated around 5% of hemp seed production for food production,  
95 % for animal feedstuff
- No specific information available about hemp seed production  
Presumably many hundred tons of hemp seed annually  
= many thousand tons of various end products
- 2004/2005 the surface area of hemp cultivation in Germany accounted  
to approx. 1800 hectares (incl. fibres)

Source: nova-Institut (2006), BMELV (2004/2005)

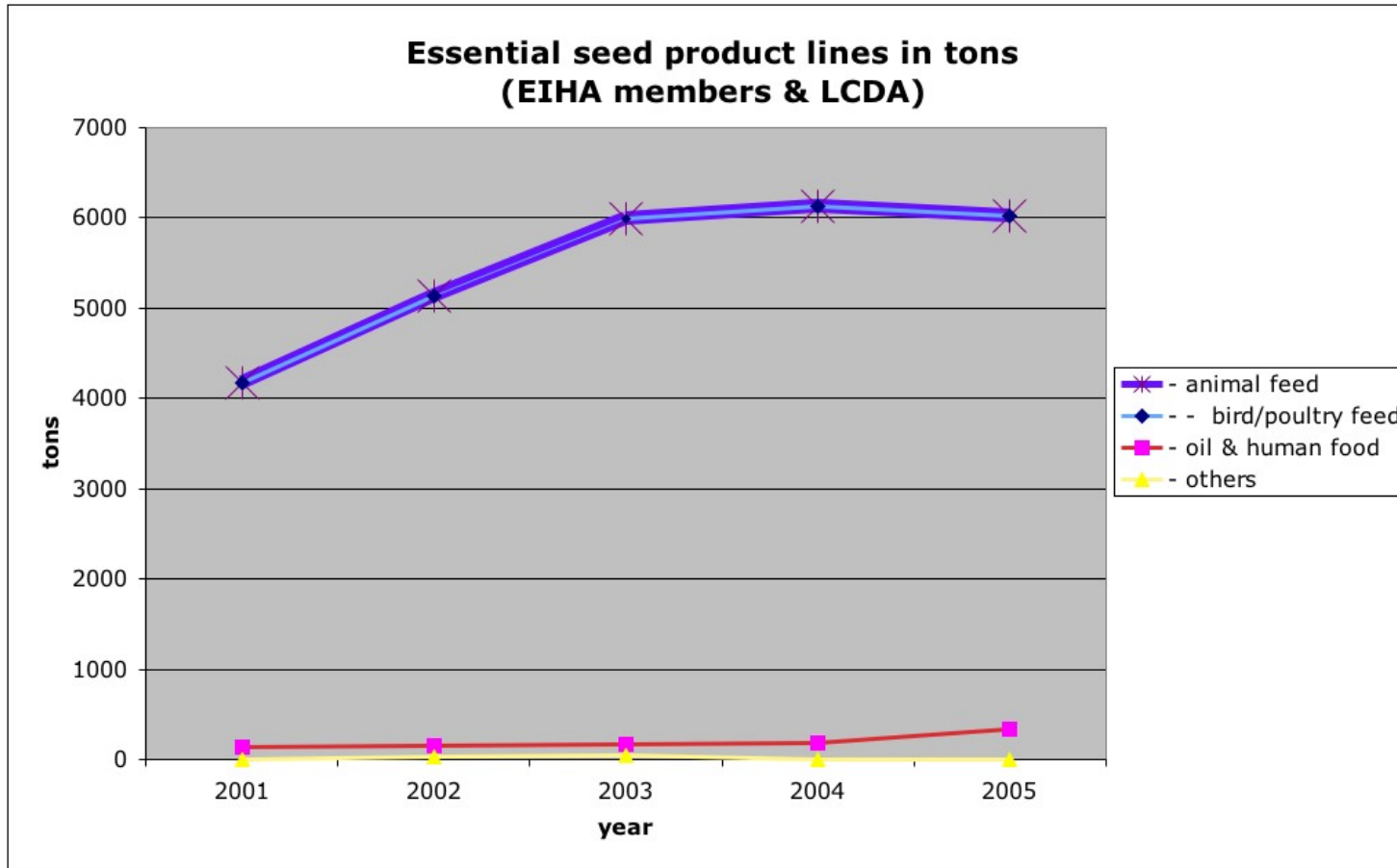
## Comparison of market volume for hemp (2):

### - Status EU:

- 2000 - 2006 hemp cultivation area around 14000 - 15000 ha (due to stable fibre production)
- 2004 seed production approx. 7000 t; since then no significant increase
- Derived from the 7000 t = 6000 t for animal feed (bird-, fish-) and 1000 t for foodstuff (oil) and in small amounts for cosmetics

Source: Estimates nova-Institut (2006), BMELV (2004-2006), FNR e.V. (2006)





Annotation: others = e.g. cosmetics

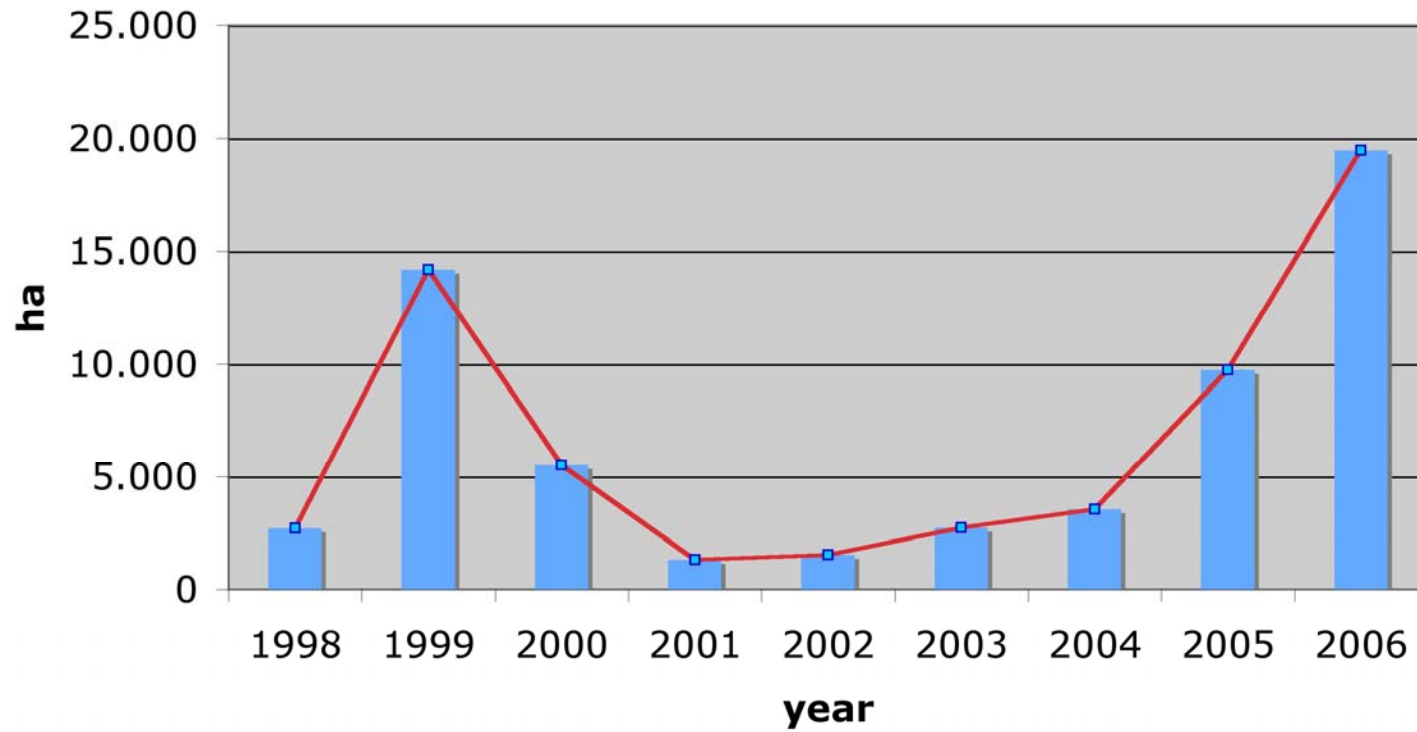
Source: EIHA (2006)

## Comparison of market volume for hemp (3):

### - Status Canada:

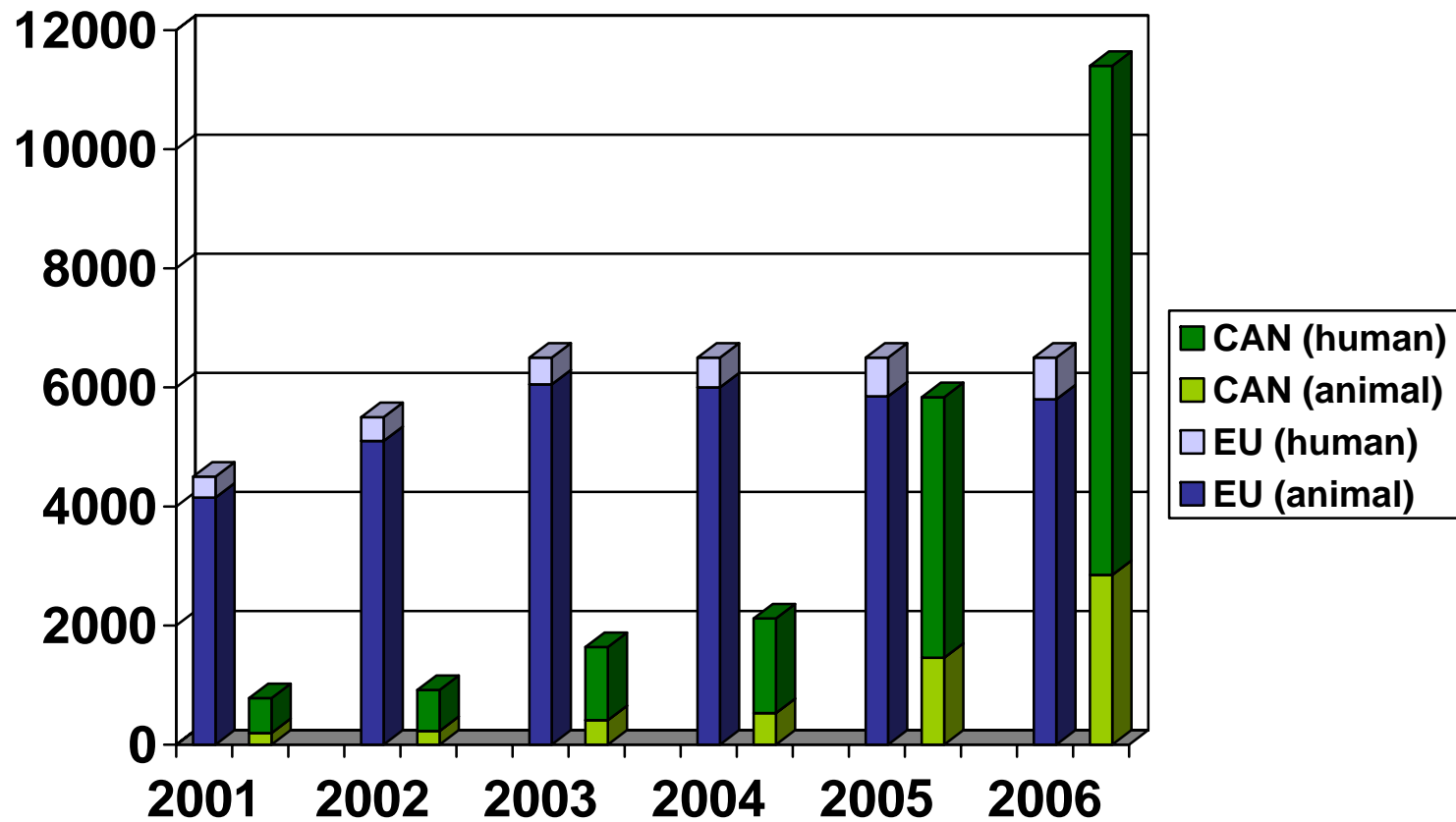
- 2004 to 2005 hemp Cultivation area increase from: 4000 → 10000 ha
- From 2004 seed production: approx. 2000 t hemp seed; since then high increase
- Derived from the 2000 t approx. 750 t for hemp oil production and 900 t for hulled hemp seed and hemp protein flour
- Virtually all production for seed – no utilization of fibre!
- More than 60% of acreage is certified organic and targets food market.
- Estimated Cultivation area 2006: 14000 ha, achieved: 19000 ha
- Based on calculation, the increase in acreage from 2004 – 2006 indicates that approx. 500-600 t oil and 1000-2000 t of hulled seed/flour can be produced in the meanwhile.

## Canadian Hemp Cultivation 1998-2006



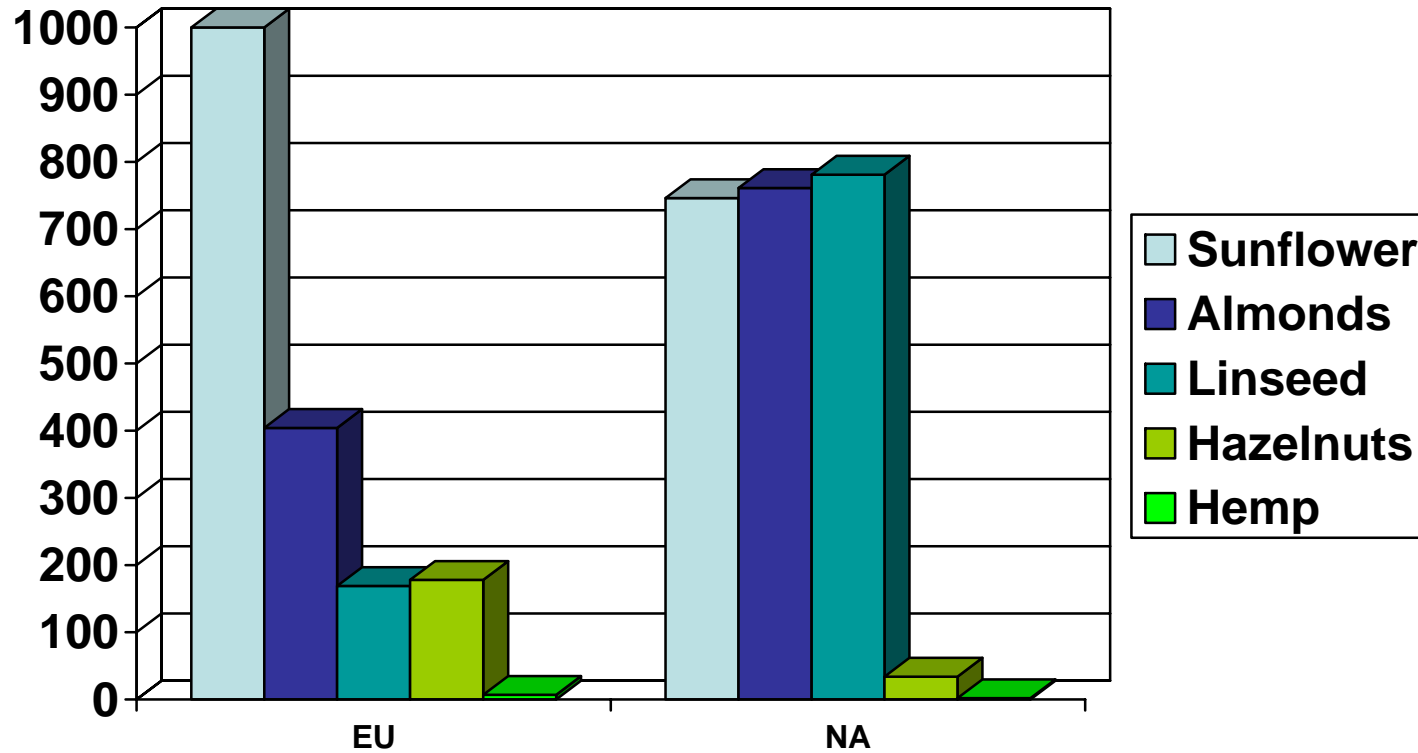
Source: Health Canada, 2006

## Development of EU hemp seed production in tons (estimates):



Source: Estimates nova-Institut (2006)

## Comparison of total market volume in 1000 tons 2004:



	Germany	EU	Canada	USA
Sunflowerseeds	69,65	4100,00	54,40	692,30
Almonds	0	404,45	0	761,29
Linseed	13,00	169,70	516,90	265,98
Hazelnuts	0	178,48	0	34,02
Hemp	> 1	7	4	0

Source: FAOSTAT, Eurostat, Statistics Canada, U.S. Sunflower Crop Quality Report

## Reasons for problems/challenges:

- **Quality:** e.g. ffa (free fatty acids indication number), cleaning, drying etc.
- **Availability (Supply):**
  - Increase of desired amounts, only stepwise possible
- **Countries of origin:**
  - Germany, but only small amounts
  - France provides high quality seed, but expensive
  - East Europe and China gain importance as seed distributors, but yet with certain quality problems
- **Marketing:**
  - Achieve greater attention in trade and with customers
  - No standard customer information available
  - The hemp foods hardly reach German supermarket chains
  - Abroad, integration in supermarket assortments (product design)

## Future prospects:

- North American data shows that high sales turnover and substantial amounts can be achieved.
  - ➔ Good perspectives for the EU market
- In Great Britain, Canada and USA, hemp already belongs to the standard sortiment in supermarkets
- ➔ This should also be possible in the EU and other countries e.g. Germany.
- Example: If only 10 % of the population in Germany would integrate 10 ml of hemp oil in their daily nutrition, a yearly requirement of approx. 30 million litres of hemp oil e.g. 100 000 tons of hemp seed would result.

Source: u. a. nova-Institut (2006)

**Thank you for your attention!**



For any further questions please do not  
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