

# **Hemp Support: Evolution in EU Regulation**

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## **Abstract**

The European Union holds a place of distinction amongst the industrialized world as measured by its long term support of the flax and hemp fibre sectors. More recently, EU fibre support has resulted from successful lobbying efforts by groups in France, Belgium and the Netherlands, and by the emergence of new technical applications for flax and hemp fibres. Relative to many other industrialized countries, the EU appears committed to green policies that hold promise of both environmental and social benevolence. However, EU hemp fibre support has encountered difficulties including subsidy chasing (as a result of hemp fibre aid rates higher than that of other row crops), expanded plantings thwarted by low yields, and disputable concerns over illicit marijuana production. After 30 years of hemp aid, fibre support levels have been cut while processing aid has been temporarily granted to bolster progressive industrial applications of short fibres. However, concerns persist that EU agricultural policy continues to favor the traditional textile fibre sector. A close look at the evolution in EU hemp regulation may provide valuable lessons for other countries contemplating commercial hemp production.

## **Introduction**

While developing countries remain the leading producers and users of hemp fibre and oil, most industrialized countries continue to wrestle with authorized hemp production. Whereas hemp production remains unlawful in Japan and Australia, Canada has only recently re-authorized hemp production, and the United States continues to be a mixture of scattered state support stymied by federal law. Conversely, strong legislative and public support exists for hemp production and processing in the European Union.

Canada legalized hemp production in 1996 and licenses commercial production for listed varieties of *Cannabis sativa* L. with less than 0.3% tetrahydrocannabinol (THC). Farmers must pass stringent security checks, provide GPS coordinates of the plots, and be subject to surprise crop inspections to confirm THC levels. Notably, beyond defining and defending the regulatory environment, the government of Canada does not provide any direct monetary support for hemp production or processing. (Health Canada, 2001)

Interest in hemp production continues to grow in the United States. To date, eight states have authorized marketing and production studies of industrial hemp (Hawaii, Kentucky, Maryland, Minnesota, Montana, New Mexico, North Dakota, and Virginia), while none have legalized commercial hemp production (North American Industrial Hemp Council, Inc., 2001). Ultimately it is the Drug Enforcement Agency (DEA), (as mandated by federal statute), who has the authority to permit hemp production (for research or commercial purposes), despite state attempts to confiscate that power. That is, DEA approval must be obtained for all hemp production, regardless of state endorsement. If industrial hemp production were legalized in the

United States, it would exist in a strict regulatory environment. (Vantreese, 2001)

Hemp production in many European countries, notably France and Finland, has never been prohibited. Since 1970 the European Union has supported their domestic hemp industry through direct monetary aid to hemp fibre farmers and processors. Why has the EU taken such a different direction from that of Canada and the U.S. in subsidizing hemp fibre production? First, the European Union has a tradition of providing extensive subsidies to many, if not all, of its agricultural industries, and hemp is no different. An express goal of EU Common Agricultural Policy is to protect farming not only as an industry, but as a way of life in rural communities.

It could also be said that the EU has a much stronger environmental mission than other countries, as evidenced by the existence of a bonafide Green Party, the highest rate of organic food consumption per capita of the industrialized nations, and arguably some of the best public transit in the world. Consequently, tax rates in western Europe are much higher than in the United States, as many in the EU have voted with their Euros to support social goals. Finally, it could be argued that western Europe has more tolerable attitudes towards personal choice and is arguably more protective of individual privacy than many other countries. Relative to most other countries, the EU has been much more receptive towards alternative crops such as industrial hemp that hold promise of both environmental and social benevolence.

Many advocates in the industrialized world have argued that, despite the long history of production and use, the industrial hemp market is a classic infant industry case. The argument

goes that unless domestic supply exists, the market cannot develop; and without market demand the agricultural sector will not risk producing hemp. Others have gone further to contend that subversive actions by the petroleum and paper industries have intentionally kept hemp a marginal crop. Consequently, some believe temporary government assistance is required to resuscitate the hemp market, as has been provided to other agricultural sectors such as the wine, mushroom and thoroughbred horse industries. Further, subsidies may be necessary to enable the hemp industry to compete with other alternative fibres, particularly fibre production from developing countries with considerably lower wage rates. If the infant industry argument is accepted, there may be some justification for providing market assistance to revitalize the world hemp industry and stimulate further investment.

Conversely, arguments against legalizing hemp production - let alone providing government support! -- are huge and politically precarious. Most hemp advocates feel that commercial production alone would be an enormous victory. Even if government assistance is never forthcoming, as countries contemplate full-scale commercial hemp production, what can we learn from the European experience? The evolution in EU hemp support may provide some lessons for other countries contemplating legalized hemp production.

## **Methodology**

The majority of the information obtained for this manuscript was gleaned from over 30 years of EC/EU Directives, Regulations, and Decisions, as published in the *Official Journal of the*

*European Communities*. Unfortunately popular press articles, including those from the main stream media, and industry news releases frequently proved inaccurate. While hemp fibre legislation is most often inextricably tied to flax fibre legislation, the manuscript focuses on the former. However, evolution in EU flax fibre policy can be found in many of the same legal documents referenced. It should be noted that the EU does not, and to the authors knowledge never has, directly supported hemp seed production.

Finally, the manuscript focuses on changes in legislation as it relates to the primary issues of subsidies (area payments), processing aid, Maximum Guaranteed Quantities, and permitted THC levels. Rather than structure the paper around the legislation, the legislation has been structured around these topics. Information regarding investment and grants for the hemp fibre processing industry can be found elsewhere (Karus, et al., 2000).

### **Original EC Hemp Legislation**

In an attempt to further diversify its agricultural base and to encourage the production of alternative crops, the European Community began subsidizing flax and hemp fibre production in the early 1970s. EC legislation was developed under the assumption that volatile prices had discouraged the rational production and marketing of flax and hemp fibre, and that current production was not sufficient to meet demand. It was further believed that Community standard provisions were needed to govern contractual relations between the growers and the processors (Regulation (EEC) No 1308/70, 1970). In addition, a common organisation was “mainly initiated

to support a traditional regional rural hemp activity centered around fibre flax, particularly in Belgium, France and the Netherlands” (Proposal for a Council Regulation, COM(1999) 576 final, 1999). It is interesting to note that EU hemp legislation was originally designed using flax legislation as a template.

In 1970, Regulation (EEC) No 1308/70 attempted to “facilitate the adjustment of supply to market requirements” for flax and hemp by constructing:

*(a) measures to promote better organisation of production, marketing  
and processing into fibres of flax straw and hemp straw*

*(b) measures to improve quality*

*(c) measures to promote research into new uses*

(Official Journal L 146 , 04/07/1970 p. 0001 - 0004, 1970)

To achieve these objectives, the European Commission defined a regulatory environment in which *Cannabis sativa* L. could be produced and targeted for monetary subsidies, restricted hemp production to full-time farmers, required the use of EC-listed varieties that contained less than 0.3% THC, and specified various modes of verification and oversight on program compliance (Official Journal L 146 , 04/07/1970 p. 0001 - 0004, 1970).

While the original 1970's legislation encouraged industrial hemp production in the EC, not all individual Member States have chosen to participate. For example, England did not legalize hemp

production until 1993, Germany in 1996, and Sweden has yet to approve hemp production. Conversely, countries such as France and Finland have never made hemp production illegal. Consequently, farmers in Member States where the cultivation of *Cannabis sativa* L. is illegal are not eligible for Community hemp subsidies.

After being amended several times, Regulation (EEC) No 1308/70 is no longer in force and has been replaced by several other Council Regulations. Given the significance of these legislative changes, it is important to understand why these revisions were needed.

### **Difficulties Encountered and Hemp Support Reform**

As with most government programs, legislation must be continually fine-tuned as market conditions change and individuals learn how to “work the system”. Many of the difficulties that have affected the hemp (and flax) market, have occurred in other commodity programs as well. However, the cost of the fibre flax and hemp scheme increased from EUR 74 million in 1995, to EUR 158 million in 1999, and EUR 173 million in 2000 (or US\$ 153 million). Consequently, budgetary pressures and other difficulties convinced the European Council that reform of flax and hemp fibre support was needed.

### **Increased Hemp Production Resulting in Budgetary Pressures**

Hemp fiber production in the EU has climbed significantly in recent years. Areas planted to hemp in the EU increased from about 6,000 planted hectares in the 1970's and 1980's (Hennink, 1997)

to 40,000 hectares in 1998 (Proposal for a Council Regulation, COM(1999) 576 final, 1999), and falling to 32,000 hectares in 1999 (European Report, 2000). Perhaps surprisingly, accordingly to the EU Commission, the EU “*has no official figures on the volume of hemp grown. The acreages declared by Member States and indicative yields give a figure to be treated with caution, of around 30,000 tonnes of hemp fibre*” (European Commission, 2001). Notably, while hemp acreage is well-reported, yield data is less precise given that subsidies are on a per hectare (rather than yield) basis. Perhaps some of the best hemp fibre production data by Member State has been reported using European Commission data, as augmented by the nova Institute (Karus, et al., 2000).

Since hemp support is extended on a per hectare (rather than yield) basis, EU policy has resulted in notable increases in hemp plantings. Significant increases in hemp production have been deemed a budgetary burden by Members of the European Parliament and the European Council sought avenues to reduce budgetary aid for alternative fibres. In addition, significant investment has gone into fibre processing plants, partly using EU government-provided grant aid. For some countries, such as Wales, this has been part of a larger economic development diversification strategy. In spite of these investments, existing regulations have not been able to effectively deal with the current oversupply of hemp on the European market.

According to the European Council, “*the scheme has become very complex and the plethora of checks and administrative procedures makes it very difficult to manage...and... the measures taken have failed to halt the increase in cultivated areas in recent years.*” (Proposal for a



Council Regulation, COM(1999) 576 final, 1999). In November 1999, the Council of the European Union proposed further change in EU flax and hemp fibre policy. Following are some of the specific challenges the EU hemp fibre scheme has encountered.

### Subsidy Chasing - Linkages Between Price and Yield

Monetary aid or subsidies are determined by the amount grown (“crop declarations” that are submitted prior to the growing season) and the total pool of money committed to subsidizing hemp and flax. Subsidies are paid in full to growers, with the requirement that producers must have contracts with primary processors (to assure that the fibre is indeed processed). In some Member States hemp and flax aid has led to purely speculative production, since subsidies afforded to these fiber producers have been significantly higher than that of competitor crops. This has resulted in hemp and flax not always being sown for commercial production, but in some cases for access to aid rates that are higher than that of other arable crops (ie., subsidy chasing).

The Commission contended that:

*The major economic problems encountered in the common organisation of the market stem from the existence of aid levels per hectare, which, for short fibres, are extremely high in relation to production costs and the value of the product itself...To circumvent such problems, per-hectare rates of aid for producers of flax and hemp grown for fibre should be brought down to the rates for competing arable crops. (Proposal for a Council Regulation, COM(1999) 576 final, 1999)*

This assertion evoked a strong reaction from many in the hemp industry that argued the EU Commission was poorly informed about short fibre production costs and returns (again, see the study by Karus, et al., 2000). Despite these objections, pressure persisted to modify EU fibre policy.

For the 1999/2000 marketing year, the flat-rate aid for fibre hemp was set at EUR 662.8/ha (or about US\$ 232/ac). The Commission claimed that production costs were typically EUR650-800/ha (Proposal for a Council Regulation, COM(1999) 576 final, 1999). Thus, the typical commercial hemp producer could cover nearly all costs of production with just the subsidy. The Commission further argued that:

*Given its attractiveness, the aid provided for in Regulation (EEC) No 1308/70 has given rise, in some member States, to purely speculative production. Steps taken to combat this phenomenon have further complicated the legislation governing this sector and have not always had the desired success... To ensure a smooth transition to the level of support granted for cereals and to solve the current problems caused by the existence of different aid schemes for fibre flax and seed flax, the payments for flax and hemp grown for fibre should be the same as those granted for linseed, which must themselves be aligned with those for cereals by the 2002/2003 marketing year. (Official Journal, L 193, 29/07/2000 p. 0013, 2000)*

As a result, in July of 2000, Council Regulation (EC) 1672/2000 amended Council Regulation (EC) 1251/1999 to specifically include flax and hemp grown for fibre under the general support system for producers of certain arable crops. A comparison of hemp fibre aid rates in 2000/2001 with those of other crops, as presented in Figure 1: EU Subsidy Rate Comparisons, provides evidence of the Commission's concerns. (Although hemp subsidies are paid to producers on a per hectare basis, conversion to a tonnage basis is necessary for cross-crop comparisons.)

For the 2000/2001 marketing year, the aid rate for hemp fibre was reduced to EUR 646.31/ha (or US\$ 226.24/ac) to begin the transition to lower support rates. (Commission Regulation No 2373/2000). Assuming low-average commercial yields of 6 tonne/ha, hemp fibre producers could expect to earn over EUR 100/tonne from the subsidy alone. This compares with subsidy rates for other arable crops that are much lower (Council Regulation (EC) 1251/1999, 1999). Council Regulation (EC) 1672/2000 also provided for supplemental aid to Finland and parts of Sweden.

Area payments for flax and hemp fibre will be reduced to that of linseed in 2001/2002, or EUR 75.63 /t, which in turn must be reduced to that of cereals for the 2002/2003 marketing year. At that point hemp and flax fibre support will then fall into the same general support scheme as for arable crops (cereals) of EUR 63 per ton (US\$ 56/ton) in 2002/2003. For high-yield producers, say 8/tonnes per hectare, this subsidy rate will equal a little over EUR 500 per hectare. For low-yield hemp fibre producers, the drop in subsidy levels could be enough to put them out of the hemp fibre business.

### Minimum Fibre Yields

Subsidy chasing has also resulted in greater hectares of hemp planted, yet lower yields than might otherwise be realized. Since aid is given on a per hectare basis, the incentive to maximize yields and engage in true commercial hemp production has faltered in many cases. Subsequent legislation to combat this problem has not always been successful and has, in some cases, been overly complicated.

While legislation outlining minimum yields for flax fibre were set in 1997 (Commission Regulation (EC) No 2183/97), minimum hemp fibre yields were not established until 1999. Initial yield levels for non-deseeded hemp fibre were set at 2.5 tonnes per hectare for Belgium, Denmark, France, Ireland, Luxembourg, the Netherlands, Austria, Finland, Sweden and the United Kingdom, and 1.5 tonnes per hectare for all other Member States. Allowances are given for adverse weather conditions and other factors that may reduce yields and partial payments may be made in the case of yields that fall below the minimum required. If minimum yield levels were not reached, aid payable was to be reduced by 65%. (Commission Regulation (EC) No 452/1999, 1999)

### Processing Aid

At the time that flax and hemp grown for fibre was proposed to be placed under the system for production of certain arable crops and aid rates were to be slowly reduced, the Commission recognized the growing importance of short fibre hemp for specialized uses, such as the automobile industry. The growing importance of the short fiber market was specifically noted:

*The flax and hemp sector has undergone profound changes since the entry into force of Commission Regulation (EEC) No 1308/70 of 29 June 1970 on the common organisation of the market in flax and hemp (5). In addition to the traditional production of long flax fibre for textiles and the traditional uses of hemp fibres, flax and hemp are now also being grown for a new market in short fibres. Since these short fibres can be used for new materials, their production should be encouraged in order also to promote innovative markets offering a future. (Official Journal, L 193, 29/07/2000 p. 0013, 2000)*

To ensure that the drop in aid to hemp and flax fibre producers did not unduly damage these promising industrial applications, additional aid was proposed for hemp and flax fibre processors.

It was believed that additional support for short, cleaned fibres would:

*“Improve the payback from investments already made or still under way. It would also encourage the development of an environmentally-beneficial crop and new agricultural outlets that stand a chance of finding a lucrative industrial market in the longer term” (Proposal for a Council Regulation, COM(1999) 576 final, 1999)*

In July 2000, Council Regulation (EC) 1672/2000 authorized the provision of processing aid for flax and hemp fibre production for five years, as detailed in Council Regulation (EC) 1673/2000.

Processing aid for hemp fibre was set at EUR 90 /tonne for the 2001/2002 to 2005/2006

marketing years (with some allowance for varying impurity levels). Further, the Council permitted the authorised primary processor and the farmer may, under certain conditions, be one and the same. Council Regulation (EC) No 245/2001 of 5 February 2001 further spelled out the rules governing eligibility for processing aid, further definition of the marketing year, and elaboration on Maximum Guaranteed Quantities (see below). While this processing aid has been of value to both hemp and flax processors, some have argued that traditional flax processors have been shown favor over the short hemp fibre processors.

To be eligible for the aid, each farmer must have a contract or commitment to process the hemp prior to production. However, the actual amount of total fiber aid granted is only known after processing (thus total yield) is complete. Processors must also submit applications for authorization to receive processing aid. If Member States do not receive enough applications for aid, the national guaranteed quantities can be reallocated to accepted primary processors and farmers (“persons treated as processors”) in other states. Advances of aid can be paid to the authorized processors and are equal to 80% of the aid corresponding to the quantities of fiber declared.

#### Maximum Guaranteed Quantities

To reduce unforeseen budgetary pressures arising from the changes in aid and processing schemes for flax and hemp fibre, a stabiliser mechanism was also proposed in 1999. Maximum Guaranteed Quantities limit the amount of fiber that is eligible for aid and vary by Member State and by marketing year. The Commission argued that these new reductions in direct producer aid

and the addition of processing aid would result in a substantial reduction in areas sown for hemp and flax production, yet provide renewed support to “*farms with real and economically viable production of these crops*”. As the processing aid ended, area payments would fall from about EUR 80 million in 2000/01 to EUR 50 million in 2005/06. (Proposal for a Council Regulation, COM(1999) 576 final, 1999)

The Maximum Guaranteed Quantity was set for 135,000 tonnes for both short flax and hemp fibre, per marketing year. For Member States, the following National Guaranteed Quantities were established for processing aid (with some provision allowed for transfer between States):

- 10350 tonnes for Belgium
- 12800 tonnes for Germany
- 20000 tonnes for Spain
- 61350 tonnes for France
- 5550 tonnes for the Netherlands
- 2500 tonnes for Austria
- 1750 tonnes for Portugal
- 2250 tonnes for Finland
- 2250 tonnes for Sweden
- 12100 tonnes for the United Kingdom

and 5000 tonnes to be apportioned in national guaranteed quantities for each marketing year

among Denmark, Greece, Ireland, Italy and Luxembourg. Furthermore, in 2006/2007 both the national guaranteed quantities and the processing aid schemes will cease.

#### Unlawful Cannabis sativa L. production and harvesting

While problems of vandalism in licit hemp fields and illicit production of Cannabis are rare, some problems do persist. Pressure was placed on the European Council to better regulate the THC content of authorized hemp production. Council Regulation (EC) 1672/2000 mandated a reduction from 0.3% to 0.2% tetrahydrocannabinol for approved hemp varieties, beginning with the 2001/2002 marketing year. Further restrictions will be imposed to prevent illegal cultivation of hemp as marijuana, while shedding of “unnecessary extra controls intended to prevent hemp cultivation for Cannabis production”. To better regulate the THC content of authorized hemp production, Member States must develop a system for verification on 20-30% of the areas grown for hemp fibre. A complete specification of verifying THC levels and eligible hemp fibre varieties can be found in Commission Regulation (EC) No 2860/2000.

Penalties were imposed if States did not conform to existing regulations specifying THC content and the harvesting window. For example, the marketing year for hemp has been very tightly defined and required setting seed so many days prior to harvest, which favored many French varieties. French varieties have been a problem in northern EU countries, since these varieties do not set seed early enough at higher latitudes. In 2000 Britain was asked to pay back £300,000 (US\$ 430,000) for allowing the harvesting of hemp earlier than permitted. (Global Hemp, 2000)

The subsidy amount returned may have been due to the fact the seed had not set as required by



EU subsidy rules. (Personal correspondence: David Watson IHA Chairman, May 2001.) As partial remedy, Commission Regulation No 2316/1999 has been amended to allow for differences in harvest windows across Member States due to “conditions of normal growth in accordance with local standards” if the producer in question has already been subject to the appropriate checks (Commission Regulation (EC) No 2860/2000).

### Exchange rate fluctuations

All monetary aid to farmers and processors is now calculated in Euros. If the value of the Euro relative to the Member States currencies devalues by certain margins, transitional agrimonetary aid may be provided to hemp farmers and processors. Fifty percent of the agrimonetary aid will come from the European Commission and a noncompulsory 50% from the Member State. (Official Journal L 349 , 24/12/1998 p. 0001 - 0007, 1998) Similar exchange rate risks are apparent with other commodity support programs, but less so as Member States converge on a single currency (that is, the Euro). For example, only EUR 120,000 (US\$ 105,000 current dollars) of transitional agrimonetary aid was allocated to the hemp sector in 1999.

### **Legislative Summary**

Wading through Council Regulations can be a laborious process. In general, EU hemp support reform has worked to 1) reduce subsidies to the flax and hemp fibre sectors; 2) provide for short-term processing aid to these sectors (to encourage innovative technologies); and 3) reduce illicit marijuana production. To summarize the above hemp support reform, key hemp legislation has

included:

*Regulation (EEC) No 1308/70:*

- Original legislation providing subsidy support to flax and hemp fibre producers

*Council Regulation (EC) 1251/1999:*

- Currently defines general support system for producers of certain arable crops

*Council Regulation (EC) 1672/2000:*

- Amended Council Regulation (EC) 1251/1999 to specifically include flax and hemp grown for fibre under the general support system for producers of certain arable crops
- Reduced area payments for flax and hemp fibre to that of linseed for marketing year 2001/2002, which in turn, must be reduced to that of cereals for the 2002/2003 marketing year
- Provided processing aid for flax and fibre production (including farmer eligibility) for five years
- Established Maximum Guaranteed Quantities
- Reduced THC content for approved hemp varieties from 0.3% to 0.2%

In summary, as EU hemp fibre producers began a new marketing year, July 1, 2001, several changes in EU hemp support were initiated. Hemp farmers can expect the following key

changes:

**Key Changes for Hemp Fibre Producers (2001/2002)**

1. Drop in aid to EUR 75.63 /t, falling to EUR 63/t next year
2. Possible EUR 90/t processing aid
3. Reduction in permitted THC levels to 0.2%

## **Conclusion**

While Canada legalized the production of industrial hemp via the free market model, the European Union took a decidedly different tact. For 30 years the EU has worked to support hemp and flax production, albeit most intensively in the last five years. With the drop in hemp aid prices from about EUR 100/t in 2000/2001 to EUR 75.63/t in 2001/2002, it will be very interesting to see how EU production responds. Although the temporary provision of processing aid (estimated at EUR 90/t) will partially offset this reduction in production aid, the elimination of the subsidy-chasers and the new maximum guaranteed quantities most likely will result in a decline in EU hemp production in the short-run. A further drop in hemp aid to EUR 63/t in 2002/2003 and the elimination of processing aid in 2006/2007 may lead to further declines in hemp fibre production (assuming current Maximum Guaranteed Quantities are not stifling production).

However, if the EU hemp processing market continues to grow, shorter hemp supplies could cause upward pressure on prices. The real test is whether the EU hemp industry is strong enough to absorb those price increases, and whether hemp can remain competitive against other natural and synthetic competitors. While most policy decisions are not economic ones, many would argue that EU hemp support has been an intriguing exercise in supporting green politics with economic subsidies. As the global hemp debate continues, it is essential to understand the competitive environment.

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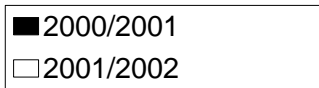
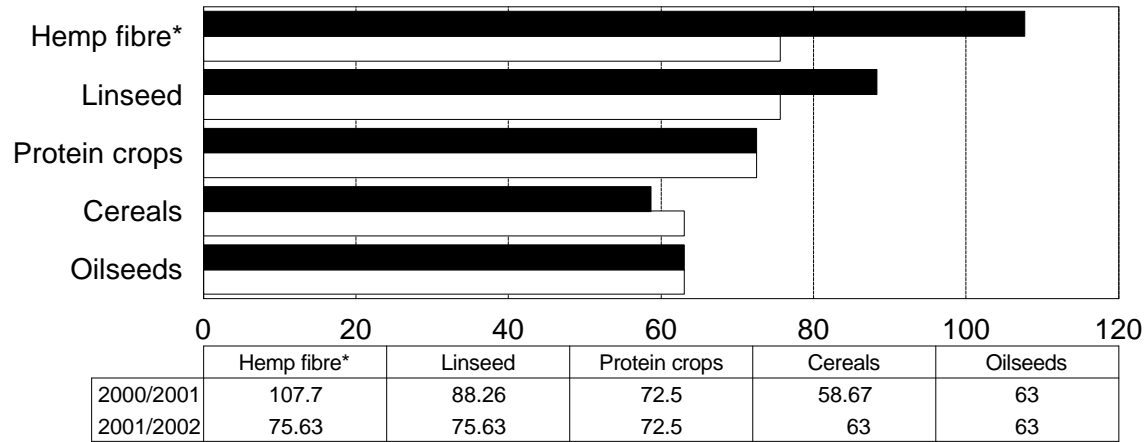
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# Figure 1: EU Subsidy Rate Comparisons (per tonne)



\* Assumes 6 t/ha yields in 2000/2001  
Does not reflect possible EUR 90/t processing aid for 2001/2002