

# the hemp store

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April 27, 2011

Standards Management Officer

Food Standards Australia New Zealand

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## **SUBMISSION ON APPLICATION A1039:**

*to amend Standard 1.4.4 of the ANZFS Code to permit the use of non-drug varieties of Cannabis sativa as food*

**Submitter: The Hempstore Aotearoa Tapui (Ltd.)**

This submission is in SUPPORT of the Application. We do wish to be heard, if the opportunity arises.



*Hemp seed foods, clockwise from top left: oil, crushed seed, milk, cake, whole seed, seed nut ("meat")*



*Hemp field at Geraldine, New Zealand*

## INTRODUCTION

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### About The Hempstore Aotearoa

- 1) Thank you for the opportunity to make this submission on a matter that is of great interest to us, both as a business and as citizens concerned for the health and wealth of New Zealand and Australia.
- 2) The Hempstore Aotearoa is a New Zealand-based manufacturer, wholesaler and retailer of hemp products. We began trading in 1996, with a retail store based in Central Auckland and we now run an international web order service. We intend to increase our product range and our market, and eventually expand our concept and systems internationally.
- 3) We thank FSANZ for your well researched and erudite Consultation Paper. We have not attempted to answer the questions posed in your document one-by-one, but instead aimed to present an informative report that describes our experiences, interests and preferred outcomes pertaining to the application. However, at the beginning of each section, where applicable, we have indicated which Consultation Paper Questions that the following passage is most relevant to.

### Our General Position

(Questions 8, 9)

- 4) **We have an interest in the outcome of this application for the following reasons:**
  - a) Hemp seeds and seed oil are nutritious and beneficial to human as well as animal health and wellbeing. The consumption of hemp based foods should be encouraged.
  - b) Prior to the 2002 Ministerial Council decision on Application A360 we imported and distributed several successful hemp food product lines including hemp seed muesli bars, chocolate, pasta, teas and confectionary. We had intended to develop local production of these and other hemp food items. Since that decision hemp food products have been seized by the New Zealand Customs Service. The products have been sorely missed by our customers.
  - c) In future we would like to help develop local manufacture of hemp seed and seed oil food products. This would reduce costs to consumers, reduce food 'miles', create local employment, help grow the local agricultural and food technology industry, and ensure freshness and a product that is appropriate for the New Zealand market. We have the ideas and the funding – we just need the ban lifted.
  - d) Experience in Europe and Canada has shown that food products are the main economic driver behind developing their hemp industries. This is due to the high labour costs in Western nations, as well as the ease with which hemp seeds can be incorporated into existing food manufacture. Development of New Zealand and Australian hemp industries has been severely restricted by



the ban on hemp food production (with an exception only for hemp seed oil in New Zealand, which has been useful and appreciated, but has not provided enough opportunities).

- e) The failure of the 2002 Ministerial Council to draw a sensible distinction between hemp seed food products and cannabis drugs has created a confusing legal situation from which no party emerges a winner:
  - i) Australasian hemp growers and manufacturers are more restricted as to what they can produce for their local markets;
  - ii) retailers in the hemp industry are greatly limited as to the products they can sell, and unsure of the legal status of some products;
  - iii) local consumers on the lookout for viable non-meat sources of protein and dietary oil cannot understand why hemp seed foods are not available;
  - iv) Australasian food regulators could be seen as simple-minded for having apparently confused marijuana with hemp seed.

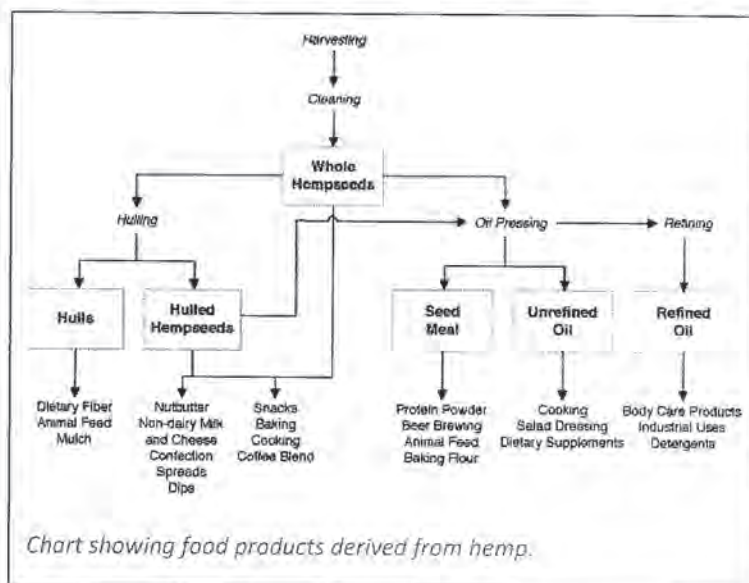
## DISCUSSION

### Expected Benefits from Change to the Regulations - Economic/Nutritional/Environmental/Ethical

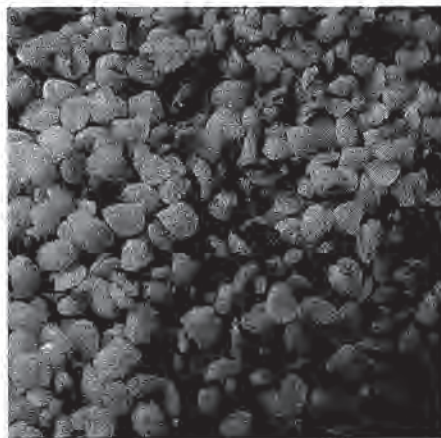
(Questions 8, 9)

- 5) If allowed to fully develop, the embryonic Australasian hemp seed food industry promises significant near-future and long-term benefits for our economy, our environment and the health of our population.

- a) Hemp seed is a highly nutritious, fast growing food that is very suitable to the New Zealand and Australian climates and economy. As agricultural nations, we should take full advantage of the opportunity presented by this resource.



- b) Most of the world's legalised hemp food markets are Northern hemisphere based and require a winter supply from the Southern hemisphere. This could be a huge opportunity for Australasian farmers and food manufacturers.
    - i) Although current regulations do not prohibit exports, the retardation of the local industry by current regulations means that this economic opportunity is still grossly under-exploited by Australasian producers.
  - c) Environmentally speaking, Cannabis sativa requires few pesticides or herbicides and provides a very resource-efficient yield per acre, compared to other food crops. Therefore hemp production matches New Zealand's clean green image in the international market, as well as having obvious appeal as a health food.
- 6) **The ban on hemp seed food products denies the New Zealand and Australian people access to a nutritionally comprehensive food source. Hemp seed offers these excellent benefits for human health and nutrition:**
  - a) Hemp seed is an excellent source of vegetable protein: it is second only to the soybean in gross amount, but higher in globulin edestin, the protein that human cells are built from and which soy proteins must be converted into.
  - b) Hemp seeds contain all the amino acids essential to human health.
  - c) Hemp seed is an excellent source of essential fatty acids Omega 3 and Omega 6, and is the only food that provides these super lipids in the "magic" 1:3 ratio that is ideal for absorption into the human body, and provides the correct EFA balance for human nutrition.
  - d) Hemp seed is also a good source of complex carbohydrates, vitamins, minerals and fiber. Hemp seed has almost no saturated fats.
- 7) **Farming hemp for food will help relieve pressure on other food sources and could help avert a global food crisis.**
  - a) At present, there is growing interest in EFA and protein rich foods which is creating a higher demand for fish, an important resource already under pressure.
    - i) The main alternative promoted is flaxseed, which is helpful but neither flax nor any other seed crop can produce the same overall quantities of both oil and protein as hemp. And unlike flaxseed, hemp seed tastes good. There is therefore a significant nutritional,



*De-hulled hemp seed, high in protein, is often called the nut or meat.*



economic and environmental benefit to be gained from permitting hemp foods with particular regard to relieving pressure on our already over-taxed fisheries.

- b) Along a similar vein, it is generally recognised that crop and grain farming produces food more efficiently than animal farming (in terms of yield / land & energy use), and hemp is among the most yield efficient of all crops.
  - i) Therefore, large scale production of oil and protein rich food from cannabis could help reduce reliance on high density farming of eggs and meat, which is environmentally and ethically desirable, and important to a growing population of consumers.
- c) The world is beginning to experience global food shortages and food prices are generally rising.
  - i) International concern is sufficient that in April 2008, the Chief Executives Board of the United Nations established The UN High-Level Task Force on the Global Food Crisis, which is led by the UN Secretary-General and the Director-General of the UN Food & Agriculture Organisation.
  - ii) The impending gravity of the food crisis makes it even more urgent that such an important and potentially plentiful food source as hemp seed be vigorously explored, especially by a primarily food-producing economies such as New Zealand and Australia.
  - iii) The current refusal by Australasian governments to fully tap into the potential of hemp foods is therefore not only economically obtuse, but also perhaps from a global perspective, ethically irresponsible.

### **Historic Economic Costs of Current Regulations**

(Questions 8, 9)

- 8) It is particularly unfortunate that the Ministerial Council's 2002 refusal of Application A360 occurred only shortly before hemp crop trials concluded in New Zealand and regulated commercial hemp cultivation was allowed to go ahead.
  - a) This meant that the New Zealand hemp industry was effectively disabled at birth. The reason for this is that the NZ hemp industry is necessarily mainly food driven. The infrastructure required for fiber technology and textile production (the other main lines of hemp industry products) is far too expensive for local business interests to invest in, without significant buy-in from big business (which generally appears to regard industrial hemp more as competition than an opportunity). Food and body-care (seed oil) products are the only viable option for most NZ hemp industry prospectors, which tend to be small operators, with food being by far the more commercially important of these.
- 9) Today, NZ hemp food producers and retailers must make do with only extracted oil and animal feeds (mashed whole hemp seed), which represent a tiny fraction of what is possible to achieve with

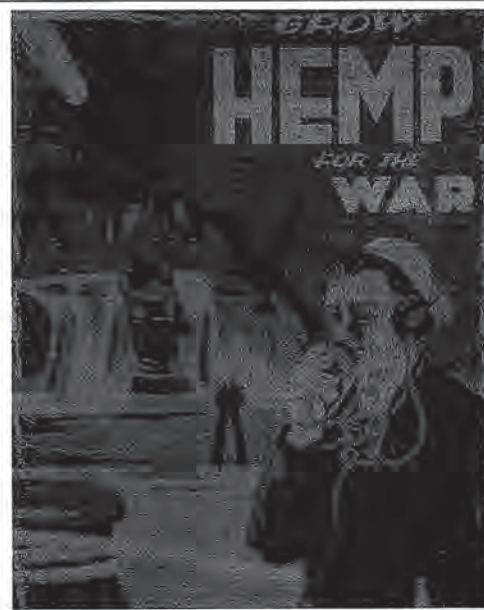
hemp seed foods. If it were not for the ban on hemp foods, our industry could be much larger, employ more people, and be more beneficial to the economy.

### **KiwiCanna: an example of the potential benefit from regulatory change**

(Questions 8, 9)

10) In 2009 The Hempstore Aotearoa developed a range of hemp seed animal feed called “KiwiCanna”, which is made of the crushed whole hemp seed – a bi-product of hemp seed oil extraction. As well as humans, animals such as domestic pets, birds, horses, cattle and fish all benefit from the nutritional advantages of hemp seed. KiwiCanna is available as both seed cake and milled flour, yet because it is a bi-product of pressing hemp seeds for culinary oil, KiwiCanna is manufactured to human food grade standards.

- a) KiwiCanna is the Hempstore’s fastest growing product line. This is despite KiwiCanna being a fairly rough and raw food product, available only as animal feed. Animal feed is one of the few opportunities open to Australasian hemp farmers and manufacturers. There would clearly be a significant benefit to local food producers and consumers if a greater range of hemp seed food products could be developed for human consumption.
- b) The current regulations impose significant costs upon developing the KiwiCanna brand: they greatly limit consumer choice; they limit how we can market and sell the product, and more importantly perhaps, they limit our ability to provide appropriate information to consumers about KiwiCanna if it were used as a human food. Normally a health food would be sold with information about recommended daily intake, preparation and the like. These standard health food retail practices are not possible with KiwiCanna because it is cannot be sold for human consumption.



*US founding fathers George Washington and Thoman Jefferson were hemp farmers. The US banned hemp in 1937, yet by 1941 it was again patriotic to “grow hemp for the war”*



#### ADDRESSING THE 2002 MINISTERIAL COUNCIL PERCEIVED RISKS

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- 11) The decision of the 2002 Food Regulation Ministerial Council not to allow the sale of Hemp seed foods in Australasia appears to have been based on four main perceived risks. We do not consider any of these risks to be valid, and will address them each in turn.

#### **Claimed risk #1: Consumers may be misled into purchasing hemp food products under the impression that they are drugs or contain drugs**

(Questions 1, 2, 7)

- 12) The Hempstore has sold hemp seed food products since 1996, although since the 2002 Ministerial Decision against Application A360 this has mainly been limited to locally produced oil and animal feed.
- 13) Our hemp food consumers are normally health-conscious and are seeking out hemp seed products because they have already researched the nutritional benefits themselves.
- 14) On a few occasions we have been asked if food products possess drug qualities, usually by tourists who are unsure of NZ drug laws and are under the influence of wishful thinking.
- a) These naïve inquiries are very rare and in hindsight centered on one product: a brand of hemp seed chocolate called Cnuster that had a large bright green cannabis leaf depiction covering the front, in a manner that humorously highlighted the cannabis association. The vast majority of consumers immediately recognised this as a joke.
  - b) In our experience products portrayed as health food or quality confectionary received no drug-related interest at all from customers.
- 15) Our retail experience tells us that consumers who are mislead into thinking that hemp foods possess drug qualities will be so rare that this represents an insignificant potential cost, which is far outweighed by the benefits of permitting hemp seed foods.
- a) In any case, rather than banning the entire food source, this tiny risk could be easily mitigated by introducing labeling restrictions on hemp foods to:
    - i) prohibit drug references; and/or
    - ii) include a mandatory requirement for a statement that the foods possess no drug qualities; and
    - iii) limit the size of any hemp leaf depictions on the packaging to (we suggest) a sober 5cm squared.

- b) The Hempstore would be inclined to support such labeling restrictions as they would protect the reputation of hemp food products from being undermined by businesses using inappropriate marketing strategies.

**Claimed risk #2: Hemp seed foods in the food chain may confound drug tests for marijuana use.**

(Questions 3, 4, 5)

- 16) Hemp is grown from registered varieties of cannabis that contain less than 0.3% THC. None of the hemp grown in New Zealand has tested above 0.1%.
  - a) Hemp seeds do not contain any THC. The only way for THC to enter the supply of hemp seeds is by contamination with some hemp resin – containing less than 0.1% THC – sticking to some seeds. This can easily be remedied by washing the seeds.
  - b) We agree with the Consultation Paper's assessment that amounts this small are highly unlikely to trigger a positive result for a marijuana drug test. This position is in line with the best current science on the matter.
- 17) Even if this perceived concern had any validity, it would be an unfair reason to ban hemp seed foods, because there are already legal products on the market which can produce false positives for drug tests, such as poppy seeds bagels which can falsely indicate opiate use.
  - a) The burden should be on drug testing proponents and manufacturers to show their tests really do indicate actual drug impairment, rather than banning food sources that may cause false positives on their shonky tests.

**Claimed risk #3: Drug-variety cannabis may somehow enter the food supply as hemp food products**

(Question 6)

- 18) The fear that drugs may enter the food supply via hemp foods is unfounded. It hasn't happened anywhere in the world. New Zealand hemp crops have been regularly tested for THC content since licensed cultivation of hemp began here, and the THC content has never been above 0.1%, let alone the allowable 0.3%. It is also our understanding that a dose of greater than 1% THC is needed to feel any 'recreational' effect, while even the lowest potency marijuana is more like 3%, or thirty times greater than New Zealand hemp crops.
- 19) Furthermore, there is no advantage for illicit drug growers to hide marijuana in hemp because the marijuana would become seeded and low quality – and worth less on the illicit market. Any seeds would also be useless for growing marijuana because they would contain 50% low-THC hemp genetics.



**Claimed risk #4: The availability of hemp foods in health food contexts may send a confusing message to the public about the health and safety of drug-variety cannabis**

(No questions suggested by FSANZ: considered to be "outside the scope of this Application")

- 20) One of the most frustrating aspects of the current regulatory ban on hemp foods is that it often appears to stem from political motivations, rather than genuine health concerns. The problem is illustrated by this "concern", which has no basis in reality and looks to have been dreamed up for argument's sake only. We agree it is "outside the scope of the Application", and for the sake of relevance and fairness, would like to see it eliminated from the conversation altogether.
- 21) Not even the most naïve consumer is likely to confuse the nutritional benefits of hemp seed foods, found in such products as muesli, hemp milk and protein powder, with the psychoactive effects of marijuana. This is not the same as a customer being unsure of whether or not the food products contain drugs, but actually the notion that the separate issues of nutrition and recreational drug-use could get mixed up.
- a) We are alarmed that some elected representatives on the 2002 Food Regulation Ministerial Council apparently did confuse them, or so extremely underestimated public intelligence as to think that others might. We hope that the members of the new Ministerial Council, when considering this Application, will see fit to dismiss this "risk" and recognise it as merely an unfortunate lapse of judgment by the previous Ministerial Council.

*LICENSING, REGULATIONS AND CONTROLS*

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- 22) The Hempstore acknowledges the diligent research conducted by FSANZ on what the appropriate allowable levels of THC should be for food. We accept your recommendations on this matter, as set out in the Consultation Paper.
- 23) The current licensing restrictions and regulations in place for hemp cultivation in New Zealand are more than sufficient to allay the concerns raised by experts and politicians considering Applications A360 and A1039.
- a) Given that current hemp regulations successfully ensure that all legal hemp grown in New Zealand is of negligible THC content, no additional restrictions need be placed on manufacturers or suppliers of hemp foods.
- b) Any such additional restrictions would constitute an unreasonable burden on a promising new industry.
- c) This is with the exception of some possible labeling and marketing regulations, which we agree may be desirable.

24) In fact, the Hempstore feels that current restrictions ought to be relaxed as some existing requirements already constitute an unfair burden on hemp producers, which unnecessarily limit industry growth.

- a) Current regulations require multiple licensing, so that a hemp license holder cannot sub-contract work to an individual or organisation without them also holding a license. This means that not only the grower, but any sub-contracted growers, the transporters, and manufacturers of secondary product must all hold (expensive and tricky to obtain) hemp licenses. This is senseless because once it is established that the initial license holder is using certified low-THC hemp seed, there is no logical reason why any processors should be subject to more scrutiny than similar workers operating in any other industry.
- b) The restriction against selling or processing viable (sproutable) hemp seed for food should be scrapped. So long as all legal seed stock is from a low-THC certified source, which is guaranteed by current controls, there is no reason that fertile seed not be available for food.
  - i) Growing seed into plants without a hemp license would still be illegal, but sprouting the seed for consumption should be allowed, because hemp seed sprouts are of even higher nutritional value than whole, un-sprouted hemp seed, and the best quality hemp milk is made from sprouted seed.
  - ii) The health risks to society posed by consumers having access to fertile low-THC hemp seed are nil, because even if civilians chose to flout the law and grow plants from the seeds, the resulting product would be useless for drug purposes.
  - iii) Fertile low-THC hemp seed is legal and available throughout Western Europe including the UK, where it is used for nutritional sprouts, and there has been no issue there with people trying to grow un-licensed hemp.
- c) The provision that hemp license holders not have previous convictions for cannabis drug cultivation, although superficially reasonable, should also be scrapped.
  - i) This is because reformed cannabis growers may bring a cannabis cultivation knowledge-base and skill-set to the field, which would benefit horticulturalists who are less experienced with cannabis.



*Canadian hemp crop being harvested using modern combine harvesters, 2004.*



- ii) Industrial hemp cultivation also presents a logical path of rehabilitation for reformed cannabis drug growers who wish to make a useful and healthy contribution to society and the economy.
- iii) The strict vetting of seed stock allowed for hemp cultivation, and regular testing of hemp crops for THC levels provide more than adequate protection against industrial hemp cultivation being subverted to produce cannabis drugs (a highly unlikely scenario in any case), so no useful purpose is served by penalising applicants for past errors.
- d) We have it anecdotally from producers that the current hemp license application process – as set out in the Misuse of Drugs (Industrial Hemp) Regulations 2006 – is obscure, complicated and expensive.
  - i) This may be partly because hemp licenses in NZ are handled by Medsafe, an organisation with expertise in licensing medical drugs, not agriculture. This is an ironic anomaly, considering that the licenses are specifically intended for non-drug producing strains of cannabis.
  - ii) We believe that a review of hemp license application, issuing and controls should be undertaken, with the intent of making hemp licensing easier, to encourage more participants into the industry, which will facilitate its growth.



*Motueka hemp crop being harvested using traditional equipment, 2007.*

#### **SUMMARY AND CONCLUSION**

#### **25) The Hempstore Aotearoa supports Application A1039 for the following reasons:**

- a) Hemp seed is a high quality food that can be produced in large quantities with a low environmental burden.

- b) So long as adequate controls on the THC levels of industrial cannabis seed stock are maintained, there are no risks associated with hemp foods.
- c) The nutritional benefits offered by hemp seed will improve the health of New Zealand and Australian citizens.
- d) The economic benefits offered by the hemp food industry will increase the wealth of New Zealand and Australian citizens.
- e) The environmental benefits of producing oil and protein rich food from cannabis will help relieve pressure on over-taxed fisheries, which has desirable global ecological implications.
- f) Large scale production of protein and oil rich food from cannabis will help reduce reliance on high density farming of eggs and meat, which has desirable ethical and environmental implications.
- g) The mass production of hemp foods may have a significant role to play in alleviating the United Nations-recognised global food crisis, which has desirable economic, ethical and environmental implications.
- h) The current regulations against hemp foods cause resentment and frustration among Australasian health food producers, retailers and consumers, which breeds disrespect for governmental food regulations.
- i) The current regulations against hemp foods cast Australasian food regulators in a bad light, as they create the alarming impression that experts and politicians have somehow failed to comprehend the difference between hemp foods and cannabis drugs, which is a distinction the general public have no difficulty in making.

**26) The Hempstore states the following priority recommendations and preferred outcomes with regard to Application A1039:**

- a) **That the Application to amend Standard 1.4.4 of the ANZFS Code to permit the use of cannabis foods should be GRANTED and that therefore:**
  - i) ANZFA sets clear, consistent, and workable guidelines to assist in the fair and just regulation of the hemp seed and hemp seed oil market.
  - ii) Australian and New Zealand food regulations allow hemp seed and hemp seed oil food products of a non-therapeutic nature to be freely available to consumers without undue regulatory interference.
  - iii) Australasian businesses be allowed to import hemp seed and hemp seed oil for direct sale or further processing and manufacture, and to sell hemp seed and hemp seed oil food products domestically and internationally.



- b) **The guidelines suggested by the FSANZ Consultation Paper with regard to appropriate allowable THC levels in hemp food products be adopted.**
- c) **Viable, fertile hemp seed be permitted** for use by food product manufacturers and consumers for sprouted food nutrition and to ensure optimal freshness of hemp seed foods, given that certified low-THC cannabis seeds cannot be used to cultivate drugs, and their availability elsewhere in the world has not led to any problems.
- d) **No further controls or regulations** to be placed on hemp food producers, manufacturers and distributors, in terms of mandatory testing, inspection, taxation or any other interferences, given that current controls on hemp cultivation in Australasia have proved entirely successful in ensuring that legal hemp is a non-drug product.
- e) **Appropriate labeling and marketing restrictions** be considered for hemp seed foods, to ensure that the hemp seed health food industry's reputation is not undermined by spurious association with drug use.

**27) The Hempstore states the following additional recommendations and preferred outcomes with regard to Application A1039:**

- a) **That FSANZ recommends to the Governments of New Zealand and Australia that hemp cultivation and processing licensing processes be thoroughly reviewed**, with a view to making it simpler, clearer, fairer, more accessible than it is currently, so that the hemp industry in New Zealand will be encouraged to grow, flourish and generate additional revenue and employment for Australasia.
- b) **That the Trans-Tasman Mutual Recognition Act 1997 be given precedence over the (Australian) Customs (Prohibited Imports) Regulations Act 1956**, with regard to hemp seed foods, or, that the Customs (Prohibited Imports) Regulations Act 1956 be amended to make an exemption for low-THC cannabis products.
- c) **That the (New Zealand) Misuse of Drugs Act be amended to entirely remove cannabis seeds from the schedule of Class C controlled drugs.** We support an approach similar to that in the United Kingdom, where cannabis seeds are legal, but the act of growing them into plants is not. We also recommend similar law changes for Australia, as applicable.

28) We hope that this submission will be helpful to FSANZ in developing a useful set of preferred options to present to the ANZ Food Regulation Ministerial Council at the nearest available opportunity.

For further information please contact:

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*The Hempstore's Chris Fowlie visiting a Motueka hemp crop, 2002*