SOME BASIC THINGS TO KNOW ABOUT FINOLA FOR 2013

FINOLA is an oilseed hemp variety that began in Finland under the breeder code FIN-314, in 1995. An application for Plant Breeders Rights was registered in 1997 and granted in 1999. FINOLA was accepted to the Canadian list of hemp cultivars in 1998, where it has remained to this day. FINOLA was finally admitted to the EU list and eligible for subsidy in 2003, after a remarkable amount of administrative delay. FINOLA was the first oilseed hemp variety to be recognized by Canada and the EU.

Crop Description

FINOLA is short, dioecious, auto-flowering and early maturing. In terms of grain yield, it is the most productive variety of hemp (over 2,000 kg/Ha under good conditions). The grain is harvested by swathing or conventional combines, usually without modification. Up to 5-7 tons/Ha of straw may be produced. FINOLA grows best in continental and temperate regions, particularly between latitudes 45° - 60°. It will benefit from irrigation in areas that are prone to drought. FINOLA's high grain production, relative ease of harvest, sweet nutty taste and unique oil profile make it the oilseed crop of choice for both human foods and animal feed.

Uses for the grain

Hempseed oil is a rich source of polyunsaturated *omega*-3, -6 & -9 fatty acids, and the oil typically accounts for 30-35% of the seed weight. Hempseed also contains a high quality vegetable protein (25%) that is easily digested, carbohydrates (30%), moisture, vitamins, minerals and phytosterols. In a botanical sense, hempseed is a very small nut, which is apparent by its delicious nutty taste.

Unlike other industrial oil seeds and seed meals, raw hempseed lacks anti-nutritional factors that are found in soya (protease inhibitors), rapeseed (glycosinolates), and linseed flax (cyanogenic glucosides). As animal feed, hempseed and meal can be safely fed to ruminants, pigs, fish and birds. Most birds will aggressively eat whole hempseed. Hens fed hempseed will produce fine tasting "*omega-3*" eggs.

Hempseed oil is highly unsaturated, which makes it useful as a healthy gourmet dietary oil, and in certain industrial products; for example, as a "drying oil" in the production of specialty inks, paints and other technical coatings. A few percent of this highly unsaturated vegetable oil can be added to some fuels for the purpose of lowering the diesel solidification point in very cold environments.

Uses for the fiber

Hemp fiber is about 50-70% cellulose and 5-7% lignin. This bast fiber is still used in a variety of commercial applications that range from rough non-woven insulations, mats, nets, composites for the construction and automotive industries, to tea bags, cigarette papers and other specialty papers. The whole, unprocessed stalk is about 35-40% cellulose and 15-20% lignan. As a simple non-woven material, the fiber and biomass make excellent animal bedding, geotextiles and other geo-remediation products, compost substrates and hempcrete- a light construction material made of hemp hurds (shives), water and lime or cement. Because FINOLA is dioecious, with both male and female plants, the fiber quality is not even, and may not be suitable for woven applications. However, the male fiber is exceptionally fine, and may be selectively gathered by hand for the production of handcrafted products.

Finola ky is an incorporated partnership that maintains the FINOLA oilseed hemp variety. Our main products are OECD certified planting seed and Finola® oil. Dr. Jace Callaway and Anita Hemmilä continue to provide stewardship in the EU for this unique oilseed crop. For more info, please our visit http://www.finola.fi

Finola® is a registered trademark for food products made from the FINOLA grain, and especially used for the promotion and sales of Finola® oil. It is perfectly within your rights to purchase and grow certified FINOLA planting seed, and to produce your own oil and other hempseed food products, but please do not sell or promote your products as Finola® without prior agreement. We are especially interested in having the Finola® name used for high quality products. If you have a nice product that is made from FINOLA seed, let us know, and we may add a direct link from our page to your business e-mail. Our pages received over 10,000 hits per month in 2012.

Can FINOLA be used for drug purposes? No. After 17 years, there is no reason to imagine that FINOLA can be used as an illegal drug. This is also true of most other industrial hemp varieties. Quite simply, the levels of THC are much too low to be used as a psychoactive drug. The fear of anything from *Cannabis* is still a major cause of paranoia in the world today, but this mild form of mental illness is neither genetic nor contagious. Most forms of "cannabiphobia" are easily treated by gentle exposure to factual information and good quality hemp products!

Cultivated hemp still suffers the same legal restrictions as drug-*Cannabis* in some parts of the world, such as the USA. In contrast, hemp continues to be a growing business in Canada; the "other" country in North America. Please be sure that you are fully informed about your local laws and customs before importing viable hempseed into your country, and be aware of potential subsidies or penalties for the cultivation of hemp in your area. Also, please understand that **we have very limited resources to advise on matters of legislation or general agriculture**, or even to provide small amounts of seed or personalized advice to people who are not already customers. Consulting, seed samples and even general information are only available to those who have already purchased certified FINOLA planting seed. Free and useful information on various aspects of hemp and hempseed continue to be posted on the Finola web pages- please have a look! http://www.finola.com

Viable FINOLA seed will not be shipped to the USA (please, continue to vote for smarter politicians over there!). Farmers in Canada should please contact Mr. Shaun Crew of Hemp Oil Canada, Inc. for your certified FINOLA planting seed.

Thank you for your interest in Finola!

Dr. Jace Callaway, CEO

Finola ky <u>callaway@finola.fi</u>

POB 236

FI-70101 Kuopio, Finland mobile +358 40 725 2534

