

Industrial hemp (*Cannabis Sativa*) is one of the oldest cultivated plants in the world. For centuries, its fibres have been used to make ropes, sails and clothing. Recently the crops health characteristics have opened up markets into health foods market.

Canada has created Industrial Hemp Regulations under the Controlled Drugs and Substances Act. These regulations allow for the controlled production, sale, movement, processing, of industrial hemp and hemp products that conform to conditions imposed by the Regulations. Licencing is free of charge and is managed by Health Canada. Most varieties are required to be tested for THC content during the growing season. The cost for this sampling is the responsibility of the grower.

Industrial hemp are varieties of *Cannabis Sativa* that contain less than 0.3% THC. It is an annual broadleaf plant with a taproot and is capable of very rapid growth.

### Cost of Production per Acre Costs

	<i>Corn</i>	<i>RRSoy No-till</i>	<i>Hemp</i>	<i>Org. Hemp</i>
Tillage	30	0	40	40
Seed	65	80	84	84
Seeding	20	28	20	20
Fertilizer	100		75	
Chemical	75	50		
Insurance	5	5	17	17
Harvest	45	45	80	80
Drying	86		33	24
Cleaning			82	60
Fall Tillage	30		30	30
Storage	69	20	16	12
Transport	92	25	10	10
	Prescott	Prescott	Local	Local
<b>Total</b>	<b>617</b>	<b>252</b>	<b>487</b>	<b>377</b>
Yield bu/ac	135	36	30	22
Yield tn/ac	3.68	0.98	0.55	0.40
Price \$/tn	205	440	1210	1760
Revenue	755	432	660	704
<b>Net Acre</b>	<b>138</b>	<b>180</b>	<b>173</b>	<b>327</b>

Hemp is seeded mid to late May into well worked soil. Sandy loam soils are best, and known infestations of white mold or sclerotinia should be avoided. Soil should be 8-10 deg C at 0.75 - 1.5 inches depth where the seed is placed. Tight row spacing is optimum for weed control. It is well adapted to both conventional and organic production.

There are no registered products for weed control in hemp. If hemp has a chance to get established in a clean field free of weed competition for 2 weeks, it will close canopy and shade all other competition, until harvest. Areas missed by the seeder will become problem weed patches. A target population of 100 plants per square meter is desirable.

Plants set seed and begin to dry down mid-August, and harvest can normally begin first week of September. The grain is high moisture at harvest and it is critical to dry and cool the seed as fast as possible to maintain quality. Ideally dryer temperatures should be limited to 120F. Dry down to 8% MC for storage. Good aeration may be needed until the bins can be frozen which should be done at the earliest opportunity. It is important to be well prepared for harvest, modifications are needed to a combine to handle the volume and strength of the fiber. The longer harvest is delayed the more difficult harvest becomes as the fiber begins to break down it gets more difficult to work with. Southern Ontario harvest should be wrapping up around the third week of September.

Residue management, with a heavy disc or cutting the fiber for removal should be done immediately following harvest while the straw is still green. It is possible to follow hemp with a fall seeded crop.