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FLAX IN COLORADO

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Flax in Colorado

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There are two important products of the flax plant—flaxseed and linen fiber. Flaxseed contains from 32 to 38 percent oil, and the two important products of pressing are linseed oil and linseed meal, the latter a high-protein feed. Linen is produced from fiber flax which is a taller plant than that grown for seed.

The demand and uses for flaxseed in the United States are considerably greater than the production, and are increasing. Flaxseed is on an import basis and is protected by a 65-cent-a-bushel tariff.

There was a considerable acreage of flax grown in Colorado in the period when large acreages of sodland were plowed up, but the acreage has gradually diminished until only a few scattered patches are grown in the State at present. Some of the reasons probably for this change have been the lack of new sodland, on which flax does so well, the development of wilt, a disease of flax, the difficulty with weeds in the older land, and competition of wheat and other higher-yielding crops. Whatever the causes, at present there seems to be an increased interest in this crop in Colorado, and inquiry for information concerning the growing of flaxseed.

Flax, while usually considered a dryland crop, will respond to more favorable moisture, as under irrigation. There are usually more weed seeds in irrigated soils, however, and flax will not compete with weeds, so soil must be either very clean or the crop cultivated if it is to be grown on irrigated land.

Varieties.—Only wilt-resistant varieties should be planted. Bison, a large-seeded, wilt-resistant variety is most commonly recommended. Linota, Redwing, and Buda are other wilt-resistant varieties, and have smaller seed and more slender stems.

Seedbed Preparation and Soils.—Flax is not a warm-season crop and does better on the heavier, colder soils, except at high altitudes where it may be planted on sandy or sandy-loam soils. On dryland, flax should only be grown on summer-fallowed land. This preparation is the most ideal in that more moisture is available and the soil is more nearly weed-free. Some growers row-plant and cultivate much like beans or corn, only using a row width of 20 to 28 inches instead of 36 to 44 inches as for beans or corn. This may also be done on irrigated land, and sugar-beet machinery can be used. Growers believe that yields are increased by this method and are more cer-

tain. The value of the crop will determine whether this extra labor may be profitably expended.

On irrigated land it is suggested that flax be planted on land that was in a clean-cultivated crop the year before. Good clean corn, potato, sugar-beet, or bean land can be easily and quickly prepared for planting flax. It will not be necessary to plow such land but a light double-discing, or harrowing and floating will usually make a desirable seedbed. It should always be **firm**, with a mellow surface for best results with flax. Do not manure land to be planted to flax as weeds invariably are troublesome when this is practiced.

Never plant flax **over 1 inch** deep and shallower planting is preferred if surface moisture is sufficient. Many failures are attributed to the flax getting too slow a start from deep seeding, thereby letting weeds get ahead of the crop.

Planting is done with a grain drill. If a new drill is used which has a seeder attachment, it can be run wide open and will usually seed a proper amount of seed per acre of large-seeded varieties. If put in the grain-drill box, most drills, seeding at "closed," will seed enough per acre. Fifty pounds of the Bison is recommended as the planting rate for irrigated land and 30 to 40 pounds for dryland. A press-wheel attachment to the drill is desirable, or a soil packer run after the drill or drilling operations.

Flax is resistant to cold and does much better when early planted. Spring-wheat-seeding time or shortly thereafter is the best time to plant. It is sometimes advisable to delay planting a little in order to kill the first crop of weeds that starts in the spring. Care should always be taken not to cultivate too deeply in order not to bring up weed-seed-bearing soil to the surface. This is also true as far as practical in planting, but of course on non-irrigated land furrow openers or furrow drills may be used to put seed where it will germinate. Here again only plant the seed very shallow.

Flax is considered a good nurse or companion crop in the planting of alfalfa or clover. The firm seedbed is desirable for both flax and clover. Flax will not lodge or shade the ground as much, or otherwise seriously interfere with the clover seedlings.

Seed treatment with new improved ceresan seed disinfectant is recommended before planting flax. Follow treating directions supplied with the dust.

Irrigation.—Flax is a shallow-rooted crop, and when grown under irrigation, light irrigation is all that will be required. The heaviest demand for water will be in the bloom period and for about two weeks thereafter. Do not irrigate after bolls begin to ripen as in cool weather new blooms may appear and delay uniformity of ripening. Often flax may be grown with one irrigation at the bloom stage,

but for best results there should be adequate moisture, but not excess, in the first two feet of soil.

Harvesting and Marketing.—Flax when ripe may be bound with a grain binder or if free from green weeds, it may be harvested with a combine. All bolls should be brown and stems thoroughly dry in order to combine. Binding may be done when the bolls are ripe but the straw can contain some moisture. There is little shattering of flaxseed, giving considerable leeway in harvesting. **Thorough** drying is necessary before threshing which may be done with an ordinary threshing machine, but it should be tight and properly adjusted. It takes lots of power to thresh flax so feed the machine lighter than for other small grain crops.

There are no processing plants for flaxseed in Colorado so if flaxseed is to be grown, plans should be made for carlot shipments to market centers. Most mills will accept thresher-run flaxseed. However, to avoid paying freight on dockage, cleaning is advised if the crop contains considerable amounts of foreign material—chaff, weed seeds, and light, immature, or broken seeds. Flaxseed has to be handled in either water-tight wagons or tight, cotton sacks.

In summary, flax should only be planted on **clean** ground, in a **firm** seedbed, in **early April**, and never over one inch in depth.