

blue colour, but varieties of the plant occur where the flowers are pink, flesh colour, or white. The plants bloom very freely, but the flowers are very fugitive, opening but once. Early in the morning when the flax is in flower the plot or field will be a mass of blue bloom, but before the day is far spent the flowers will have mostly withered and dropped. Each seed pod or boll has ten cells or divisions, each of which contains a single seed.

The seeds are flat, oval in form, of a dark brown colour, with a smooth polished surface. The outer portion of the seeds contain a mucilaginous material which dissolves freely in hot water, while the interior is very oily. When the seed is steeped for a time in hot water a mucilaginous beverage is made, known as flax seed tea, which is used as a soothing drink in some forms of inflammatory disease. The seed is said to contain about 15 per cent of mucilage and to yield from 22 to 27 per cent of oil, which is known in commerce as linseed oil and is largely used in the manufacture of paints. To obtain the oil the seed is ground and heated by steam and while hot is subjected to strong hydraulic pressure, when the oil flows freely from the pressed material. The cake left after the oil is extracted is known as oil cake, which when ground is much used as a food for cattle.

The fibre is that which gives to flax its greatest value. On cutting through a stem of this plant, the centre is found to be occupied by pith surrounding which is a layer of ordinary woody fibres, and outside of these is the inner bark which is formed of very long and remarkably tough fibres, the whole being covered by a skin or epidermis. The value of the plant depends on the abundance, length and quality of the fibre, and these characteristics can only be obtained where flax is grown in a suitable climate. The fibre of flax is very tough and is well adapted for spinning, and as compared with cotton, wool or silk is a good conductor of heat, linen clothing being proverbially cool.

GROWING FLAX FOR ITS FIBRE IN CANADA.

The cultivation of flax mainly for its fibre has been carried on in some parts of western Ontario for many years, the yield of seed under such circumstances being a secondary consideration. To grow flax successfully for fibre, a moist climate is said to be necessary, and in seasons when the rainfall is deficient the fibre produced is smaller in quantity and inferior in quality. The quantity of seed used in western Ontario when sowing flax for fibre is said to be about 80 lbs. per acre, which is sufficient to produce a thick growth, with the plants sufficiently close to give long and straight straw, which generally yields fibre of good quality. The seed is usually sown in Ontario during the last week of April or early in May, commonly by a broadcast machine or otherwise by hand, and the seed is covered by a light harrowing. Where flax is grown for its fibre it is always pulled in harvesting, as a longer fibre and a larger quantity can be obtained by this method. In some localities men are employed in pulling, while in others the larger part of this work is done by women and children. The pulling is done before the seed capsules are quite ripe, when they are just beginning to change from a green to a pale brown colour. As the crop is pulled it is tied in bundles or small sheaves which are placed for a time in stooks in the field, and when dry it is drawn to the storehouses. It is threshed by the use of a special machine which separates the seed without injuring the fibre in the straw and the straw is subsequently retted and scutched and the fibre thus prepared for market.

RETTING.

In retting or rotting as usually practised the dried flax is placed in ponds or dams of soft water, the water being about four feet deep. The stalks are tied in bundles and pushed roots downwards in the ponds or dams until they are quite full. Over the top of the upper layer is placed a covering of straw and on this sufficiently weighty