Oregon State Agricultural College Extension Service

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Rape

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Rape a valuable pasture. Rape is a plant similar in food value to cabbage and kale. It is rich in protein and ash, or minerals. A considerable number of leaves are developed during the first season of its growth,

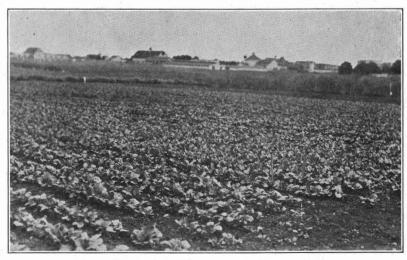


Fig. 1. Dwarf Essex rape seeded in rows.

making an extremely valuable forage and pasture crop. This is its principal use in the Willamette Valley. It is sometimes planted in rows and used as a soiling or green feed crop. In cold climates rape winter-kills unless pastured closely. Where it survives the winter a considerable number of branches develop, which soon produce bloom and seed. It is grown very extensively in Western Oregon, and to some extent in the irrigated and sub-irrigated areas in Eastern Oregon.

Rape is one of the cheapest and quickest growing of the temporary forage crops. Seed is cheap and not much is used per acre. There are numerous varieties. Dwarf Essex is best. It is especially well suited to mild, moist climates and deep, rich, mellow soils. As the rooting system of rape is relatively shallow, it does not make very satisfactory growth under Eastern Oregon dry-farm conditions. The plant makes its best growth on rich soils, and requires considerable available plant food and moisture.

Seed-bed preparation. To produce most satisfactory yields, it is usually best to manure the soil rather heavily. At least 10 tons an acre are generally needed unless the soil is an unusually rich one. Manuring of the land previous to planting the rape is generally beneficial, as the rape crop leaves very little organic matter, and there is considerable tramping during the pasture season. Early plowing followed by disking, harrowing, and often rolling to produce a fine, firm, weed-free seed-bed is desirable.

Sowing directions. Generally the crop is sowed broadcast at 3 to 5 pounds an acre on a seed-bed that is rather fine and firm, like a clover seed-bed.

The sowing should usually take place about April 25 to June 10. For early summer pasture, the earlier sowings are best. It is usually undesirable to sow the rape before the ground warms up sufficiently for quick growth. In a great many cases 10 to 12 pounds of red clover are sowed with the rape as a companion crop.

In other instances the rape or the rape and clover may be drilled shallow.

The rape is sometimes drilled alone in rows, 2 or 3 feet apart, using 2 to 3 pounds of seed per acre. This method is used mainly where the soil dries out rather badly during the summer, and the number of plants per acre must, therefore, be limited. Weeds between the rows are kept under control by frequent shallow cultivation until the crop gets big enough so that sheep may start pasturing. They usually keep the weeds pastured off.

If the seed-bed is moist, with any of these methods of sowing there is no occasion for further packing of the soil, but if the seed-bed is dry it is generally best to roll after sowing.

Under irrigated conditions it is sometimes possible to sow the rape in the spring with oats or barley, and to use it as a pasture crop after the grain is removed. It is also possible in some instances to sow the rape in a crop of early corn at the last cultivation. Where there is enough moisture to germinate it and develop it in the corn, it makes fall and spring pasture.

Pasture methods. When the crop is six or eight inches high, it is used for sheep or in some instances for hog pasture. Where cattle are to be pastured on rape it is generally better to wait for a larger leaf growth.

The bloat hazard. Rape is a rich food like a legume, and with sheep or cattle there is some danger of bloat. The usual precautions against that trouble must be observed. It is generally best when turning cattle or sheep on to rape pasture to fill them up on other feed so that they will not overeat of the fresh, succulent, green material. Until they have become thoroughly accustomed to the feed do not leave the stock on too long each day. After a few days of this method of handling, they may be left on the pasture. They should not thereafter be taken off and kept away so long at any time as to become hungry and greedy for it.

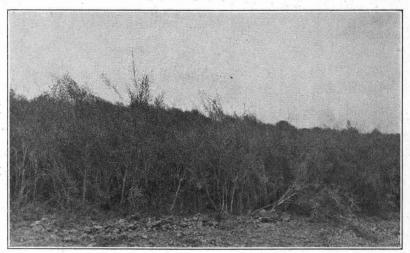


Fig. 2. Dwarf Essex rape ready to harvest for seed.

Rape is useful as a pasture for sheep, hogs, and cattle. To a limited extent it is made use of as a pasture for milk cows. While not as productive in Oregon as in regions of abundant summer rain, a great deal of excellent pasture is provided the first year. It is also quite productive the second year, if the early growth is kept pastured back. Good Dwarf Essex rape in Western Oregon will carry 3 to 5 sheep to the acre the first season.

Pests. Diseases and insect pests are not usually serious. When sowed too early in the spring in Western Oregon, flea beetles often do some injury. In Eastern Oregon plant lice frequently limit the value of the crop, especially on dry land.

Seed production. Seed is very successfully produced in Western Oregon on mustard-free or turnip-free fields. Mustard and wild turnip are bad weeds in rape seed. The seed ripens the second summer. When the rape pods are yellowing and the seed gets dark brown in color, the crop may be mowed with a mower or reaper or cut by hand. After drying on a tight floor, it may be flailed out or threshed through a thresher. Care is needed to avoid serious shattering in the field or in handling.

By allowing it to ripen on the stalk the seed may sometimes be harvested with a combined harvester. The sacked seed, unless thoroughly dry, should be spread out to avoid molding and spoilage. Combine-threshed seed, especially, should be watched.

Rape seed sometimes produces 700 to 1000 pounds an acre.

No constant eastern outlet for seed has been established, but there is a good local demand for reasonable seed supplies. The seed demand is for genuine Dwarf Essex rape.

Control of volunteer. Do not allow rape seed to shatter out on fields where you do not want it as a weed. The seed is oily and may live in the soil for many years. Where shattering has taken place, do not plow the seed under. Let it sprout, then disk and work shallow at intervals before plowing. Usually it is best not to fall-plow such land. Let the seed lie exposed on or near the surface through the winter if possible. This will get rid of much of it.