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THE SEEDING OF COWPEAS.

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The great value of cowpeas as a feed and as a soil renovating crop should give them a more important place in Missouri agriculture. The short period of growth also makes it possible to use them to great advantage as a catch crop between the regular crops in the rotation, either for hay, for pasture, or for turning under. They are therefore, especially suited to the man who wishes to build up land rapidly while he is at the same time securing a return from it in feed. The crop is one which will undoubtedly become of much greater importance in Missouri as the land is farmed more intensively.

TIME OF SEEDING.

There is a wide range in the time at which cowpeas may be sown, even in the same locality. In Central Missouri the best time to sow them for hay or seed, is about the first of June. A mistake is frequently made in sowing them early in May, since a period of a few cool days after they are up is sure to stunt them and prevent the best growth. The ground must be warm before they are put in. They may be sown as late as the first week in July in Central Missouri while in the extreme southern part of the state, peas sown the middle of July will usually give fair results. As a general rule they should be sown in most parts of the state between the first and the fifteenth of June.

METHODS OF SEEDING.

The method of seeding peas depends upon the use which is to be made of them. For hay they should as a rule, be sown with a grain

drill at the rate of four to five pecks per acre. Some men put in as much as two bushels, and while this gives a finer texture to the hay, it usually reduces the amount of seed formed. On the other hand, they are often sown at the rate of three pecks per acre, but excepting for seed purposes, or on land particularly adapted to the crop, such as the lowlands of Southeast Missouri, this is rarely enough. A small seeded variety like the New Era will require less seed per acre than the larger seeded varieties like the Whippoorwill.

For seed purposes, cowpeas are best sown somewhat thinner than for hay, three pecks usually being better than five. They should not be broadcasted either for hay or for seed on the uplands of the state. Such a method is wasteful of seed and uncertain as to a stand. They may also be sown for seed with the corn planter and cultivated, making the rows the same distance apart as for corn or the rows may be placed at half the distance of corn rows, by going over the land twice and straddling every other row. In this case, they are more difficult to cultivate as the rows are too close together for convenient cultivation. It is usually necessary in this case to take off one shovel on each gang of a six shovel cultivator and if the axle is adjustable, to so set the wheels as to avoid running on two rows while cultivating a third.

Peas sown at the usual rate for hay, generally make a good yield of seed in favorable seasons. As a matter of fact, the yield of threshed peas depends not only upon the season, but also upon the soil and the variety. A medium to thin soil will produce more seed than a rich soil and a sandy soil more than a clay soil as a rule. Varieties like the New Era which is early and which has little tendency to vine, will yield more peas than a later vining variety like the Clay.

Another method of putting in peas in rows, is by means of a grain drill where a part of the holes are stopped. Where every third hole is allowed to run and care is used in driving, the rows can be placed about 32 inches apart which is a good distance.

HARVESTING.

Cowpeas for hay or seed should be cut with a mower and if the weather is favorable, they may be cured in the swath. This method is not usually satisfactory however, as the leaves break off badly in raking up especially if one or two rains should fall while they are curing. When cured in this way a hay tedder can be used with much benefit in hastening the curing.

A better way of curing in average seasons, is to cut them in the evening or on a cloudy day so as to allow the leaves to evaporate as much water as possible before drying, and when well wilted, rake into

light windrows to cure. A side delivery rake can be used to great advantage in turning these windrows if the peas are not too viney. They may also be placed in rather tall narrow shocks after they are partially cured and allowed to finish curing in the shock.

Peas planted in rows usually fall down badly and are much more difficult to cut than where drilled. If they have been cultivated the ridges of soft dirt interfere somewhat. There is on the market, a device consisting of long fingers which are placed on the mower to lift the peas and allow the cutter bar to run under them.

THRESHING COWPEAS.

Cowpeas can be threshed with perfect success only with a pea or bean huller. A wheat thresher may be used but it cracks the peas so badly as to make it impractical except for some of the smaller seeded varieties. A wheat thresher may be modified so as to give fair satisfaction by using a large pulley on the cylinder so as to reduce the speed, while the rest of the machine is geared up to run at the usual rate. A part of the concave teeth may also be removed with good results, but these are only makeshift methods and a pea huller should be used if available. In this connection it should be said that the introduction of pea hullers should be encouraged in all parts of the state where peas are grown. The average yield of peas is about 9 to 10 bushels per acre. They may run as low as 6 bushels or as high as 25 bushels.

COWPEAS IN THE CORN.

Cowpeas may be seeded in the corn at the last cultivation or they may be put in the row when the corn is planted. In the first case, they are best drilled in with a one horse drill at the rate of two or three pecks per acre when the corn is laid by. To be sure of a stand it is best to lay by the corn a few days earlier than usual. They may be broadcasted and plowed in but this method is not so sure of securing a stand as is the method of drilling them.

Where planted in the row the best plan is to use a special cowpea planting attachment on the corn planter. These attachments are now on the market. In this case, a gallon and a half of peas should be used. The difficulty in putting peas in the row is that corn is usually planted about two weeks before it is entirely safe to sow peas. This plan is very commonly practiced however. Peas planted in this way will make more seed than where they are sown at the last cultivation and are especially valuable for hog pasture. Many men find it very profitable to hog down both corn and peas. The New Era or Whippoorwill varieties may be used where they are to be hogged down or a vining variety

which will twine about the stalks may be used and both corn and peas cut with a corn binder.

VARIETIES.

For hay the Whippoorwill, the Clay and the New Era varieties are commonly used. The New Era is an early variety and is best where they are put in as a catch crop rather late. Both the Whippoorwill and the New Era produce a good amount of seed although the New Era is usually the highest yielder. The Black pea is a good general purpose pea resembling the Whippoorwill somewhat in character of growth and in seed production. The Clay is a later vining variety good for forage but not a heavy seed producer under Missouri conditions.

Seed is available in Missouri through the seed companies or through various dealers in the Southeast Missouri lowland counties where most Missouri grown seed is produced.



COWPEAS ON THE MONROE CITY SOIL EXPERIMENT FIELD.