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Timely Farm Suggestions

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Places of Wheat and Oats in Southern Farming

OATS are better adapted to the soil and climate of the South than any of the other small grains. There is no part of the South where oats may not be grown profitably if proper regard is had for methods and time of planting, rust resistant varieties and the other crops to be grown in a rotation with them.

Wheat is much more subject to soil and climatic conditions, and only certain sections and generally only the northern third or half of the cotton Belt should grow wheat largely for grain. Wheat may be made a useful Southern crop if proper regard is had for the selection of suitable soil, varieties, etc., but the South as a whole is not well adapted to the growing of wheat. The soils are generally not rich enough and the climatic conditions too favorable to the development of rust.

Wheat should be grown on most farms, especially in the northern third of the Cotton Belt; but oats will be found a much more reliable crop taking the South as a whole.

Where the soils are suitable and experience has shown that wheat is a reasonably safe crop, a larger acreage than usual should be sowed this fall. It is a valuable food crop and the supply of wheat is short. In addition, another food crop, like peas, beans or peanuts may be grown on the land the same year.

Varieties of Wheat Best Adapted to the South

THERE is no best variety of wheat for any part of the South. Any one of several varieties is likely to do as well as any other. But the tests at the experiment stations have pointed out certain varieties as among the best. If a certain variety proves that it is among the best, ranking high for a series of years among numerous other varieties, it is pretty safe to state that such a variety is good for that section.

Again, if a variety is tested at a number of stations and ranks high at several of them, through a period of years, it is pretty safe to state that such a variety is good for general use.

Since rust is one of the greatest enemies of wheat in the South and varieties that mature early, before the weather becomes too warm, are more likely to escape damage by rust, then earliness is a most important quality for a variety of wheat for Southern use.

As a rule, Southern farmers object to bearded varieties of wheat, but there is little to justify such an objection. Judged by the above standard, the following have proved themselves among the best varieties of wheat for the Cotton Belt:

Blue Stem or Purple Straw (Beardless).
Red Man (Beardless).
Golden Chaff (Beardless).
Fultz (Practically Beardless).
Fuleaster (Bearded).
Red Wonder (Bearded).
Klondyke (Beardless).

Fertilizing Oats and Wheat

IF THE land is so poor that a fertilizer containing nitrogen is necessary in the fall, at the time of seeding, we believe it a mistake to sow such land to oats or wheat in the hope of making a paying yield of grain.

If nitrogen is used in the fertilizer at the time of seeding, the crops will no doubt make better growth. There-

fore, when the seeding is late, or if the land is poor, it may pay to use a little nitrogen in the fertilizer at this time. There is no question but the time to apply the phosphorus is when the seed is sowed, for it can then be distributed in the soil and since it is not largely leached out it will be available for feeding the crop when it is needed. But nitrogen is leached from the soil when it becomes soluble or available for feeding the crop. It is most needed when the crop makes its largest growth, and since this is in the spring that is the time the nitrogen should be applied.

At the time of seeding 200 pounds of acid phosphate or 300 pounds of a 2-10 mixed fertilizer may be applied and then in the spring when the oats and wheat begin to make their largest and most rapid growth, if nitrogen is needed, 75 to 100 pounds of nitrate of soda or a fourth less of sulphate of ammonia should be applied, as a top-dressing. The need for nitrogen is pretty clearly indicated by the color and growth of the young plants when they begin to grow in the spring. If they do not take on a dark green color and start a vigorous growth it is pretty good evidence that the supply of available nitrogen is deficient and an application of commercial nitrogen is likely to prove profitable unless other conditions for crop growth are unfavorable.

Time for Seeding Oats and Wheat in the Cotton Belt

ONE of the chief reasons for the low average yields of oats in the South is late seeding. Oats sowed after November and especially those sowed after Christmas yield from one-half to three-fourths those sowed between September 1 and October 15. In exceptional seasons some spring-sowed oats may yield more than some fall-sowed oats, but it is doubtful if the average yield for the whole South is ever greater from spring than fall-sowed oats. In tests extending over 17 years at the Alabama Experiment Station fall-sowed oats yielded more than double spring-sowed oats. Only one year did the spring-sowed oats yield more, and in that case the fall-sowed oats winter-killed badly. The seeding of the fall oats was, as it appears to us, rather late for the best results, but still the yield was double, on the average, the spring-sowed.

When oats are sowed early in the fall there is danger of too large growth and the formation of stems, in which condition oats are readily killed by frost. But the danger from this is slight, even with the earliest oats, and may be entirely avoided by pasturing. It would even pay to cut them back by running a mower over them rather than take the smaller yields which almost invariably follow late seeding.

Dividing the Cotton Belt into three parts, we suggest that oats should be sowed—

In the northern third, from September 1 to October 1.
In the middle third, from September 15 to October 15.
In the southern third, from October 1 to November 1.

In all of these zones we regard the first half of the period stated as better than the second half.

Seeding Wheat.—Our observation teaches us that the same results hold true as regards early seeded wheat,

except where the Hessian fly does serious damage. We feel certain from a careful study of the actual results obtained that the early sowed wheat matures earlier, suffers less from rust, and makes much the larger yields. In some sections the Hessian fly may make it necessary to sow wheat so late that it will not be up and large enough to offer an opportunity for the fly to lay its eggs, until the first killing or white frost. In the Cotton Belt, however, we are convinced the danger from the fly from early seeding of wheat has been much exaggerated, but north of the Cotton Belt, or in any section where damage from the fly is material, late seeding should be practiced.

Of course, the fertility of the soil and the varying seasons—moisture and advent of cold weather—very greatly influence the best date for seeding. But it is certain that these grains do not make much growth during the cold weather of winter, hence it is important that they secure a good root and make a good top growth before the cold weather of winter comes on, if they are to withstand the winter freezes and make the best yields.

We suggest the following dates for seeding wheat in the Cotton Belt:

In the northern third, from October 1 to October 15.
In the middle third, from October 15 to November 1.
In the southern third, from November 1 to November 15.

Does It Pay to Grow Oats and Wheat?

A READER wants to know if it "pays to grow oats and wheat in the South?" Another says, "It does not pay to grow corn."

It may be well to show the average yields of oats, wheat and corn in the cotton-growing states during the last ten years and then discuss this problem: Does it pay to grow oats and wheat?

AVERAGE YIELDS AND FARM VALUES PER ACRE DEC. 1, OF OATS, WHEAT AND CORN, IN THE STATES NAMED:

| | Oats | | Wheat | | Corn | |
|----------------|---------------|----------------|---------------|----------------|---------------|----------------|
| | Bus. per Acre | Value per Acre | Bus. per Acre | Value per Acre | Bus. per Acre | Value per Acre |
| Virginia | 20.7 | \$11.25 | 12.6 | \$13.37 | 25.1 | \$18.23 |
| North Carolina | 17.9 | 11.89 | 10.5 | 12.04 | 18.6 | 16.20 |
| South Carolina | 20.4 | 14.50 | 10.4 | 14.51 | 17.0 | 16.42 |
| Georgia | 19.4 | 14.08 | 10.7 | 14.01 | 14.4 | 12.54 |
| Florida | 16.3 | 12.27 | ... | ... | 13.0 | 11.60 |
| Alabama | 18.9 | 12.27 | 11.2 | 14.12 | 18.1 | 13.67 |
| Mississippi | 18.9 | 12.67 | 13.6 | 14.84 | 17.8 | 13.58 |
| Tennessee | 21.6 | 11.10 | 11.1 | 12.18 | 25.0 | 13.95 |
| Louisiana | 20.7 | 13.01 | ... | ... | 20.3 | 18.05 |
| Arkansas | 23.0 | 12.27 | 11.2 | 11.21 | 19.8 | 14.44 |
| Oklahoma | 22.5 | 8.34 | 12.1 | 10.59 | 17.4 | 8.34 |
| Texas | 28.8 | 14.50 | 12.4 | 13.85 | 19.9 | 13.76 |

The relatively lower yields of oats, except in Texas, are no doubt due to the facts: 1. That oats require earlier fall seeding than wheat, and as there are difficulties in the way of this early seeding the crop is not sowed at as favorable a time for large yields as are wheat and corn. 2. The richer lands are selected for wheat because it is generally recognized that wheat requires a richer soil than oats. Corn, being planted in the spring, is put on the river and creek bottom lands which are more moist and also richer.

At the usual prices there is no great difference in the value of these crops per acre as a general rule. When a state made an unusually high yield of any crop as of corn in Virginia or oats in Texas this particular crop gave the highest value per acre. Of these 12 states, three, Georgia, Florida and Texas, obtained the greatest average value from oats; three others, Alabama, Mississippi and Oklahoma, obtained the largest value per acre from wheat, and the other six states, Virginia, North Carolina, South Carolina, Tennessee, Louisiana, and Arkansas obtained the greatest value per acre from corn.

Considering the average values obtained per acre from these crops as

compared with the value of the cotton crop (not counting seed), it would appear that oats, wheat and corn are not the most valuable crops which the Southern farmer grows.

AVERAGE VALUE OF COTTON LINT PER ACRE ON DEC. 1, FOR A PERIOD OF 10 YEARS—1907-1916:

| | | | |
|----------------|---------|-------------|-------|
| Virginia | \$27.23 | Tennessee | 20.85 |
| North Carolina | 27.91 | Mississippi | 19.05 |
| South Carolina | 24.46 | Louisiana | 17.42 |
| Georgia | 21.15 | Arkansas | 19.53 |
| Florida | 19.59 | Oklahoma | 16.12 |
| Alabama | 18.63 | Texas | 17.13 |

In the light of these facts, we think it safe to state that considered from the point of money value alone it does not pay the Southern farmer to grow oats and wheat, and probably the same might be said of corn. But notwithstanding this seeming fact it probably pays to grow oats and wheat when they are grown as a part of a rotation which aims at keeping the land covered with some growing crop as nearly all the time as is practicable in the system of farming followed.

If, however, oats and wheat are grown and the land allowed to lie idle or bare from the time these crops are harvested until the following spring, it is pretty certain that oats and wheat will not prove profitable crops. If red clover or lespedeza is sowed with the oats and wheat, or if the oat and wheat stubble lands are planted in soy beans, cowpeas or some other crop, so as to utilize the long growing season after the oats and wheat are harvested, these fall-sowed crops will prove profitable. In fact, we think the oat crop should be largely increased and the wheat crop increased to the extent that soil and climatic conditions favor. The same may be said of corn. The average yields do not pay, but if grown with legumes in a rotation and larger yields are produced it does pay to grow corn. If corn alone is grown, an average yield made, only the grain saved and the stalks burned, or if the land is allowed to wash and leach from the time the corn matures until the next spring, it does not pay to grow corn.

PASTURE PROBLEMS

Starting Permanent Pastures—Mow the Weeds

IF PERMANENT pastures or pastures to be used next year are to be made this fall it is none too soon to be planning for putting them out. With the exception of Bermuda grass and lespedeza, practically all our commonly used pasture plants do better sowed in the fall, and this is especially necessary if the pasture is to furnish much grazing the next season.

If the pastures were not benefited this year by keeping the weeds down it would still pay to mow them whenever that can be done as a means of preventing the distribution of weed seeds. Our pastures have been a fruitful means of producing weed seeds to scatter over the balance of the farm. Some day we will appreciate the damage done by weeds and then the pastures will be given more attention.

Better results will usually be obtained by dividing the pasture into two fields, but it is a mistake to graze one too closely while the plants in the other are growing too large. Moderately close pasturing is best, after the plants have become well established or a sod covers the ground, because the plants are richer in protein while young and are relished better by the livestock. The only time that it pays to allow the plants in the pasture to get moderately large is in the fall for the purpose of furnishing late grazing after frost. With two pastures, one should be allowed to make a fair growth before frost for use later in the season.