

MORE MONEY FROM FARMING IN 1922

Farm Work for November

By J. F. DUGGAR

THE early maturity of cotton this year has made possible an early date for completing the harvesting of this crop in sections where the labor supply has been ample. Indeed, on many farms cotton has been picked early enough to give time also for the harvesting of corn before the first of November. It is important to complete the gathering of corn. However, this may better be postponed than to delay further preparation of land for the small grains and the sowing of these.



PROF. DUGGAR

Time for Sowing Oats

IT IS almost universally true throughout the Southeastern States that there is need every year for a larger acreage of oats than is sowed. In those sections where dry weather has resulted in a poor corn crop in 1922, the need is very urgent for sowing more oats than has usually been done. It scarcely needs to be said that throughout at least the lower two-thirds of the Cotton Belt, oats should be sowed in the fall rather than after Christmas. The writer has repeatedly called attention to the results of experiments conducted under his direction in Alabama bearing on this point. These covered many years, including a few in which winter killing was severe. The average yield for oats sowed about the middle of November was more than 50 per cent greater, and often 100 per cent greater, than when the date of sowing was about the middle of February.

Experimental results have been clear in showing that for every week's delay after the first of November there is on the whole a notable decrease in yield. It was once the common practice to begin sowing oats about Thanksgiving. This late beginning of the planting season for oats was made necessary by the slow picking of a large acreage of cotton then unattacked by the boll weevil. Now, with a reduced acreage of early maturing cotton and with more accurate knowledge of the decrease in yield from late planting of oats, we may well look on Thanksgiving as marking rather the close than the beginning of the season for the fall sowing of oats.

Varieties of Oats

AS TO varieties, no mistake can be made in sowing oats of the red rustproof type, whether they be bought under the name of Red Rustproof, Apple, Hundred Bushel, Patterson, Cook, or other local name. Indeed all of these so-called varieties of red rustproof oats are indistinguishable in grain, stalk and maturity and they are practically identical in yield.

Seed grown nearby is slightly to be preferred, partly because it involves less danger of the introduction of weeds that may be new to the locality, such as cheat and wild onion. In general seed oats from fall sowing are slightly to be preferred to seed from spring sowed oats, which is another small advantage of sowing seed from near home and of known history. The difference resulting from the sowing of oats accustomed to being sowed in fall as compared with those whose ancestors have usually been sowed in the spring is not usually very great. However, in an experiment at the Alabama Station there did result after about 15 years some effect in maturity and yield due to continuous fall sowing on the one hand or of spring sowing on the other. Starting with seed from the same sack, we found that after many years of continuous spring sowing that strain had become nearly a week earlier than the fall sowed strain and had become less uniform.

In case it is desirable to have oats mature somewhat earlier than is the case with the bearded varieties of the red rustproof oats mentioned above, the

Fulghum may be substituted. It belongs in the same botanical class as the Red Rustproof and has practically all the valuable qualities of the latter. It is about 10 days earlier, which is a decided advantage where the use of the land is desired for summer crops. By reason of its earlier habit, Fulghum is also better suited for sowing with crimson clover for hay.

The sowing of two varieties with different dates of maturity is an advantage in dividing the risk of bad weather at harvest time; this also permits the harvesting of a larger acreage than would otherwise be possible.

Wheat and Rye

IN REGIONS to which wheat is well adapted, November is a favorite month for sowing wheat and rye grain in the South. Those who depend partly on rye for grazing have doubtless already sowed this cereal. If not, the sooner rye is sowed the greater the amount of pasturage it will afford and the earlier the grazing will be available.

We cannot be too careful in the selection of the source of the seed rye. For both grazing and grain production it should be either Abruzzi or Southern rye. By the latter term we mean rye grown for many decades in the southern half of the Cotton Belt. Even Tennessee or North Georgia has proved lacking in the valuable qualities found in rye from lower latitudes.

A word of caution seems especially timely in these later years when so much is being claimed for Rosen Rye. This variety has a good record in the North, but in the central part of the Cotton Belt it generally fails to afford either the amount of grazing or the grain yield obtainable from the Southern and Abruzzi varieties.

It would seem a profitable specialty for some farmers to grow for seed Southern rye of a strain known to have been produced in southern latitudes for many years. The price of the southern-grown rye is always much above that grown further North, a difference in price that is fully justified.

Barley

THE few Southern farmers who grow a patch of barley for grazing rate this grain as second to none. The writer has not advised the general use of barley, chiefly because of the usual higher cost in the South of seeding an acre of barley than of the other small grains. In comparative tests of its yield of seed he has been somewhat discouraged by the fact that barley has usually suffered more from the attacks of birds. This, of course, is because of its earlier maturity. A recent study of the conditions under which barley is grown in the Southwest as the main grain crop, makes him more hopeful than heretofore that under some conditions this may become a practicable grain feed on many Southern farms. This, however, means the selection of good land and probably too the evolution by systematic breeding of varieties superior in some par-

ticulars to most of those now obtainable. Great were my expectations in this respect of the Arlington Awnless, developed some years ago by the United States Department of Agriculture, but which in experiments in Alabama has generally proved to be a smaller producer of grain than the Tennessee winter barley, which is probably the South's most suitable variety.

Treatment for Grain Smuts

NO LONGER is any farmer justified in suffering loss from oat smut, which in the Southeastern States usually varies from about 5 to 20 per cent. This disease in oats is much more easily and completely controlled than the loose smut of wheat. Oat smut, as well as the concealed or stinking smut of wheat, may be completely prevented by a simple and inexpensive treatment of the seed. It is only necessary to purchase from a drug store a bottle of formaldehyde of standard strength. Add one ounce of this to each 2½ gallons of water. In this liquid moisten wheat or oats, either by dipping or by thorough sprinkling, and leave the damp grain covered for a few hours. As soon as dry it should be sowed. The writer's practice with oats has been to sow at any time after treatment and he has never had proof of any injury from delay after treatment in the case of oats. However, in the case of wheat, and possibly also of other grains, some injury to germination sometimes results from delaying planting for a long time after the seed are treated. This point is brought out in some of the investigations in the Southwest, where, on account of peculiarities of climate and condition of soil at time of planting, treatment of smuts must be somewhat different from those adapted to the South.

Still Time for Sowing Vetch

IN THE central and northern parts of the Cotton Belt, November is late for sowing of most forage plants. However, in the Middle South vetch may be sowed in the first days of the month, and throughout the month in the extreme South.

North Carolina "Money Crops"—Cotton, Corn, Tobacco—in 1922

THE large increase of 12 per cent in the acreage of cotton to be picked this year over a year ago doesn't net nearly the production—730,000 bales, made last year—776,000, but the average price is better, it having increased, whereas it decreased during the previous season. The 218 pounds this year mean a decrease of perhaps 25 per cent in the per acre yield, but 15 per cent increase in total value at 21 cents over 16.4 cents last season. This means, too, that the per-acre value may be \$45.75 as compared with \$43.29 the previous season. Of the cotton states, North Carolina leads in the per-acre yield and value. She also has the most cotton mills. It is reported that 43 per cent of the mills in the 14 Southern states are here.

An increase of 13 per cent in the tobacco acreage, and a slight increase of yield, at 607 pounds per acre, insures an increased production of about 22 per cent. The average prices on the auction markets are not yet equal to those of last year. The total value of the crop is less than 2 per cent more. The value-per-acre is \$152.80, based on the present information available. This

THE BUSINESS FARMER'S CALENDAR: THINGS TO DO THIS WEEK AND NEXT

DON'T leave bales of cotton lying around the gin. It might be destroyed by fire. Don't leave the cotton lying on the ground. It's quite sure to be damaged by water. The bonded warehouse is the safest place to leave cotton until you are ready to sell.

2. Put heavy chains or other good stalk benders on the big turning plows and put the green cotton stalks completely under. Go at them just as they stand. Cut stalks are hard to plow under.

3. Would you like to sell the corn stalks, fodder, grass, weeds, pea vines, velvet bean vines, or whatever is left in the fields? Cattle and sheep turned

in to graze will put these things up into a salable package.

4. Right now, while crops are off the land and before the winter rains set in, is the best time to build new terraces where needed, repair old ones, and convert the old-style, narrow terraces into big, broad, efficient terraces. Don't let the winter rains take your best land away.

5. Keep a sharp eye on the seed peas and beans. Treat for weevil control just as soon as weevils make their appearance and before they have opportunity to do great damage.

6. See that every family on the place has a good milk cow to help out the cost of living this winter.

is over 2 per cent less than it was last season.

As the digging of peanuts is just begun and the previous weather was so unfavorable in the commercial north-eastern counties, it is difficult to estimate the results. The acreage was reduced; the yield expected will be perhaps nearly 900 pounds per acre, giving approximately 115,000,000 pounds production, which, at 90 pounds, will give 1,280,000 bags in this state if all were marketed. There is quite a large acreage that is not picked and not counted in the above.

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Agricultural Schools at the Virginia Fair

BACK in 1919 a movement was started which resulted in the inauguration of a livestock and crop judging contest at the Virginia State Fair between teams representing the departments of vocational agriculture in the rural high schools of the state. This contest has become an annual event, conducted under the auspices of the State Board for Vocational Education in cooperation with the Department of Agricultural Education of the Virginia Polytechnic Institute, and is now receiving the recognition from the people of the state that its value as an educational movement deserves.

This year (1922) the winners were as follows:

- 1st—Blacksburg High School, of Montgomery County.
- 2nd—Windsor High School, of Isle of Wight County.
- 3rd—Bridgewater High School, of Rockingham County.
- High man on contest—Bryce Arrington, of Blacksburg.
- 2nd—Nichols Saunders, of Windsor.
- 3rd—John Bowden, of Windsor.
- High man on Beef Cattle—D. W. Walker, of Pearisburg (Giles County).
- High man on Dairy Cattle—Bryce Arrington, of Blacksburg.
- High man on Swine—Bryce Arrington, of Blacksburg.
- High man on Corn—Marion Lynch, of Floris (Fairfax County).

Plow the Cotton Stalks Under, Do Not Burn Them

A GREAT many farmers are burning their cotton stalks, not realizing their value for green manure. The Georgia Experiment Station wishes to warn the farmers of the South against this practice. It is doubtful if many of the adult boll weevils are killed by burning, as most of them will fall off the stalks during the process of handling them. Burning the stalks will kill all the larvae and the eggs on the cotton stalks, and also destroy a great many of the adults by cutting off their food supply. But plowing under the cotton stalks will accomplish the same thing and at the same time add to the land enough green manure to more than pay for the plowing. Plowing will also kill the old cotton roots, which are apt to sprout and in this way furnish food to the weevil.

The cotton stalks on a bale-to-the-acre cotton will amount to over a ton of vegetation. This amount of cotton stalks will contain about 51 pounds of nitrogen, 33 pounds of phosphoric acid, and 50 pounds of potash. To buy this amount of fertilizer, in the form of commercial fertilizer, it would be necessary to buy 340 pounds of sodium nitrate, 125 pounds of 16 per cent acid phosphate, and 300 pounds of kaimit. This amount of commercial fertilizer is worth at present prices, about \$11.40. Besides furnishing the soil with these essential elements, the cotton stalks also add a large amount of organic matter to the soil which is entirely lacking in commercial fertilizers.

While organic matter has no market value, its value to the farmer is none the less real. Nearly all Southern soils are sadly lacking in organic matter, and when it is supplied, either by the means of green manure or barnyard manure, crops are doubled and trebled in an astonishing manner.

When the cotton stalks are burned all the organic matter and all the nitrogen are lost. Most of the phosphoric acid and the potash are wasted.

Destroying cotton stalks early in the fall is one of the best methods of checking ravages of the boll weevil, but to do this by burning is too expensive. Plowing them under is a much better way.—R. P. Bledsoe.