

# Hay Crop Should Be Used As Supplement To Grazing

### One Of Most Widely Grown Hay Crops In North Carolina; Other Types Popular

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Charge, Agronomy Extension Each farmer should take stock in his feed program to see that the greatest advantage to rearing the hay requirement. Weathers, hazards, and the labor required in harvesting, makes it economically desirable to use hay as a supplement to the pasture and grazing program.

Consideration should also be given to the quality of the hay produced as well as the quantity. Legumes such as alfalfa, lespedeza, soybeans, and cowpeas have much higher protein content than the non-legume hays, such as the small grains, sudan grass, and crab grass. Combinations of legumes and grasses can frequently be used to advantage to increase the feeding value of the hay produced. This is particularly true with small grains which can be grown with winter

peas frequently, hay crop are adequately limed and fertilized. The minerals such as calcium, furnished by lime, and phosphates, furnished by superphosphate (acid), are very important in hay. The removal of trash from the soil, particularly the legumes is frequently overlooked. Crops, following lespedeza cut for hay, frequently show potash deficiency where the crop was not properly fertilized. One ton of soybean hay moves around 47 pounds of trash. This is equivalent to the trash in about 800 pounds of a 10-0 fertilizer or 94 pounds of percent muriate of potash. One ton of lespedeza hay removes about 21 pounds of potash and about 45 pounds per ton. In the case of non-legumes, nitrogen topdressing is important to increase the yields of hay.

Lespedeza is one of the most widely grown hay crops in North Carolina. It is usually drilled or sown on small grain in February

and early March at the rate of 25 to 40 pounds per acre. The seed can be drilled by loosening the springs which force the disks into the ground. Without pressure on the disks, they go about 1/2 inch deep which is enough to keep the seed from washing into low places during rains. Where a drill is not available, the land should be harrowed to cover some of the seed and prevent excess movement of the seeds to low places.

The lespedeza hay should be cut before the stems get too woody and the lower leaves shed excessively. This is usually in the early bloom stage or when the growth is about 12 inches high. The hay is very easily cured. Where the lespedeza is cut early for hay and a few green leaves left on the stubble, it will usually make enough seed to reseed the land.

The fine stemmed varieties of soybeans such as Laredo and Ootootan make very good hay. When the coarser stemmed varieties are used, they should be planted thickly to reduce the size of the stems. They can be planted in the Coastal Plain from April 15 to June 15. The seed should be inoculated each year on sandy soils and on all soils where soybeans have not been grown recently. Soybeans have a high potash requirement and should be sidedressed with 75 pounds of muriate of potash when the beans are 6 to 12 inches high. Cowpeas are handled about the same as soybeans. The stems are less woody than soybean stems, but contain more sap. This makes the hay harder to cure. Iron and Brabham varieties are resistant to wilt and nematodes. Other good varieties are the Groit, Whipoorwill, Taylor and Clay. The hay should be cut when the pods are about half grown for best quality.

Peanut hay can be of good quality when the dirt is shaken out of the vines, the vines allowed to wilt before stacking, and the stacks built to protect the hay from the rain. Picking the peanuts as soon as possible will

overcome much of the loss of quality due to exposure. Alfalfa produces one of the best quality hays where deep, fertile, moderately heavy, and well-drained soils are available. Many of the past failures have been due to insufficient lime, fertilizer, or borax. Alfalfa has been proving satisfactory under a wider set of conditions than previously recognized, North Carolina Extension War Series Bulletin No. 21 gives complete recommendations on alfalfa.

Oats, barley, and wheat are good hay crops when cut not later than the milk stage. They are non-legumes and do best when fertilized with around 300 pounds of a 4-10-6 or 4-8-8 at seeding and top-dressed with 16 to 32 pounds of nitrogen (100-200 pounds of nitrate of soda; 80-160 pounds of Cal-nitro or ANL; 50-100 pounds of ammonium nitrate). Top-dressing should be applied not later than the middle of March.

The quality of small grain hay is materially increased by seeding with the winter legumes. A good mixture is 1 1/2 bushels of oats, 1 bushel of wheat, 15 pounds of vetch, and 10 pounds of Austrian peas per acre. Another good mixture is 1 1/2 bushels of oats, 1 bushel of barley, and 20 pounds of crimson clover per acre. Other combinations can be used depending on the type of soil available. Combination hays of this type should be cut when the grain is in the milk stage regardless of the legume.

With the wide variety of crops available for hay, the harvest season can be spread over a longer period. This will overcome the weather hazard which may be present when the entire hay crop is harvested from one crop at one time.

### LOCAL MERCHANTS GROUP ACTIVE

(Continued from page 1) both with merchandise and cash. The association has given publicity to educational programs and helped these agencies make a success of their very hard job.

At present the Whiteville Merchants Association is trying to persuade several manufacturers of products who can use the raw materials produced in Columbus County, to locate in or near Whiteville as soon as materials to construct their plants becomes available. Commitment

ments from several such industries have already been secured. There are many other projects which, when completed, will make Whiteville a better place to live but they are in the preliminary stages and can not be made public at this time.

Cotton will get keen competition from synthetic fibers after the war. Join the one-variety program to keep seed stocks pure and produce only uniform, high-quality cotton.

### CHEMICALS KILL 95 PER CENT OF

(Continued from page 1) Uramon has given outstanding control of such soil-borne diseases as root knot, black root rot, and Granville wilt. This permits permanent plant bed sides at convenient locations where the soil type is suitable and there is a good supply of running water.

Cyanamid does not control soil-borne diseases. It should be used on the dark colored, low-lying soils of the Coastal Plain because Uramon has not been too satisfactory on this type of soil. Cyanamid is also preferred on the clay soils of the Old Belt area where Uramon has given some unsatisfactory results.

Time is required to kill the weed seed and for the poisonous materials to be leached from the soil or changed to a harmless material. Therefore, the treatment should be applied at least 90 days before seeding.

Clean all weeds and trash from the area to be used for the bed. Prepare a fine, clod-free bed by breaking, discing, harrowing, and raking until smooth. Clods larger than a garden cherry will prevent weed seeds inside from being killed.

Broadcast three-fourths of a pound of Uramon or Cyanamid per square yard of plant bed. This should be done immediately after preparing the bed and before the soil has had time to dry out.

### HOW TO APPLY

Mix the Uramon or granular Cyanamid thoroughly with the top 4 inches of soil and no deeper. Disk once or twice with the disk set up at a sharp angle, or work once or twice with a 3 or 4-tooth, one-horse cultivator or similar implement. The cultivator should be used when the soil is variable, as a disk will go too

deep in some spots and not deep enough in others. Then harrow repeatedly with a spike-tooth harrow or rake thoroughly. For hand operations, use a hoe for mixing with the soil and finish by thoroughly raking.

Broadcast one-fourth pound more of granular Cyanamid or Uramon per square yard on the smooth surface. Rake in lightly and leave it in that condition until time to seed. In time of extreme drought, water the bed after applying Cyanamid or Uramon.

### AT SEEDING

Apply the usual amount of plant bed fertilizer at seeding time and work it into the top two inches of soil. Working the soil deeper may bring live weed seeds to the surface.

When directions are followed carefully, good weed control is usually obtained. Ask your county agent for the names of farmers who have used these chemicals for weed control and plan on a trial for next year. Remember that the material should be applied 90 days before seeding. Make arrangements for the Cyanamid or Uramon now, so that you will have it when needed.

### AGENT OUTLINES FOUR MUSTS FOR COUNTY FARMERS

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baggers, radish, and onions can be grown abundantly through the fall and spring months in addition to the various greens that can be planted most any time. The season to plant fall vegetables starts with the first of August and extends through September. Carrots should be planted between August 1 and 15. Lettuce and snap beans and beets should be planted in August, mustard and turnips around September 1. Onion sets should be put out in September and rutabagers planted around September 1. Collard seed may be planted in hills fifteen inches apart with five or six seed per hill, and the plants thin and large enough to use for greens. In addition to the gardens, every landlord and tenant in Columbus County is urged to make his plans now to make his own garden and might fatten his own hogs during the next few months.

It is possible for every landlord and tenant to secure two or three pigs and fatten them this fall in order that we might eat. If we expect to eat we'd better plan to grow our eats.

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