where the stock can run on it I do not think it wastes much except on the surface, and on the bottom, where the weight presses the water out, if it is drawn in the spring. I have often had to stop drawing manure in the middle of spring work and wait for the centre of the pile to thaw, and it certainly cannot waste until it thaws. It may be all right farther south, but in this climate I think it is better drawn in the spring, even though it does not get dry enough in the fields to draw it until it is time to begin spring work.

SOME FORAGE PLANTS FOR SUMMER FEED.

The pasturage tests of a number of annual forage crops made in 1898 were, with a few exceptions, duplicated in 1900, the intention being to note such variations as might be induced by a difference in climatic conditions, or in the individual perference or aversion of animals for a certain feed.

The crops tested were rye, oats and peas, Indian corn, millet, sorghum, kafir corn, and cow peas, as representing the annuals, also alfalfa and awnless brome-grass. Records were kept of the amount of pasturage afforded, and the effect of the feed upon the production of milk and butter fat.

The following are some average results for the two years :

The crops giving the largest amounts of pasturage were rye and sorghum. Indian corn and millet gave less pasturage than any of the other annual forage plants. Alfalfa and awnless brome-grass gave the least pasturage of any, the former affording considerably more than the latter. It must be borne in mind, however, that the annuals may be pastured during only a certain period of each season, while the alfalfa and brome-grass furnish feed early and late.

Cowpeas and alfalfa increased most largely the yield of milk and butter fat. Next to these came rye, oats and peas, sorghum, kafir corn and awnless brome-grass.

Cow peas produced an actually greater quantity of milk and butter fat from a given area of land, than any other crop.

A comparison was made of the amount of feed produced and the effect upon the yield of milk and butter fat, when certain crops were pastured and when they were cut and fed. The crops so tested were alfalfa, sorghum, and Indian corn. In the case of each of these, from two to three times as much feed was procured from a given area of land, when the crop was cut and fed, as when it was pastured.

The same tests indicated that the average daily production of milk and butter fat was greater for the same feed when it was pastured, then when cut and fed. This, on an average, amounted to 1.17 times greater butter fat production from the pastured, than from the soiled crop.

T. L. LYON.

Nebraska Experiment Station.

"Press Bulletin."

RAPE AND ITS CULTIVATION.

Rape is a succulent plant belonging to the cabbage family. It grows rapidly, making a large amount of green food, upon which pigs and sheep grow well. To make a success of rape, select a rich piece of land free from weeds. Plow deep, then roll—if not too moist, and harrow till the soil is finely pulverized and well firmed down. Finish the preparation by running a plank drag over it. Such a seed bed will germinate the seed quickly, and enable the plants to withstand dry weather. I prefer to have the plowing done just before sowing. This will give the rape an even start with the weeds.

Sow with garden seed-drill, three pounds or five pounds broadcast, per acre.

When drilled the rows should not be more than 20 to 24 inches apart. Drill sowing will permit cultivation, which will keep down the weeds, conserve moisture and increase the yield. Where drilled the animals destroy less as they walk, and lie down between the rows.