## **Emergency Pasture Crops**

## By T. E. Stoa<sup>1</sup>

Supplementary pasture and forage crops can be very useful. They can furnish valuable and necessary forage in periods of pasture emergency. A supplementary pasture affords protection from injury to a regular pasture through overgrazing. A part of the acreage to be retired from wheat in 1950 may well be used for the production of more pasture as well as other forages.

For pasture use a rapid-growing succulent and nutritious forage is desired. A good pasture crop must be able to recover rapidly from injury resulting from grazing and trampling. In these respects some crops are better suited for grazing than others.

Rye, oats and other cereal small grains offer the most promise as emergency pasture crops in this northern region. Rye may be sown in the fall or very early spring to furnish the earliest spring pasture. Oats, or a mixture of oats and other small grains, sown early in the spring at from 8 to 12 pecks per acre, can furnish considerable pasture until about mid-July.



Fig. 1. Dairying is most profitable when cows have plenty of good pasture, succulent milk-making feed which they harvest themselves. Above, the outstanding Brown Swiss herd maintained by Harry Tonn, Hillsboro, N. D. Below, high-producing Holsteins on the Karsten Nygard farm near Delamere, N. D., in the north end of Sargent county. Dairymen can extend the pasture season—and the period of peak milk production at minimum feed costs—by using winter rye in fall and spring, sudan grass in the heat of summer. (Both photos by W. P. Sebens of Greater North Dakota Association.)



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Sudan grass must be sown late and makes its most rapid growth during the warmer part of the summer. Except for the hazards of prussic acid poisoning, associated with sorghum crops generally, sudan grass makes an ideal summer pasture crop, yielding well and filling in a period when regular pastures usually are very short. The amount of prussic acid present in sudan is not constant. It varies with the stage of growth, and also with the season. Young plants, or new growth, is usually higher in prussic acid than the more mature growth. Thus, where sudan is pastured, livestock are usually not turned in until the grass is fairly well advanced. New growth which may come on following rains after prolonged drouth, or after an early fall frost, is usually high in prussic acid and should be pastured with caution.

The amount of prussic acid present also varies greatly with the season, and the factors responsible are not well understood. In our trials the 1949 crop was generally very low in prussic acid throughout the season. This also seemed to be the case in other places where careful tests were made.

Since sudan is an excellent summer crop, and therefore has much promise as a summer pasture, it deserves to be used. However, because of the hazards involved it is suggested that when used as pasture it be used with caution, perhaps grazing with less valuable animals for a few days to assure that it is safe. Experiment stations have in recent years isolated, and are experimenting with, strains of sudan grass lower in prussic acid and eventually hope to have available varieties of sudan grass relatively free from this hazard.

## AN APPRECIATIVE LETTER

An appreciative letter is received from Simon L. Barbadillo of Bangued, Abra, Philippine Islands, who writes as follows:

"I have received every Bimonthly Bulletin with many joys and wishes.

"I read each bulletin with much interest and enthusiasm. I greatly hope that you will continue sending me freely any kinds of free publication. Any free publications that you can spare to send me freely in the future will be greatly appreciated and congratulated by me. I express to you my heartiest thanks for your favor."

Enclosed in the letter was an interesting collection of seeds from the Philippine Islands including the following: Buri Palm Tree seed; Ilacano Bean seeds—a native vegetable; a wild al-lagat seed—a trailing plant domesticated, edible; a domesticated winged pea seed; Sour Safa seeds trees; wild Bagbagora seeds—used in cooking with vegetables and meats; a native gourd; Lingriga seeds, used in making hard candies; Mungar seeds; Pias seeds, a tree fruit, and many others.

The large selection of seeds has been turned over to the Department of Horticulture and the Department of Botany for study and possible investigation as to their adaptation if at all, to this part of the United States; and if not adapted to this part of the United States to be sent to our warmer southern climatic regions.—(HLW)