Disco

TRADE MARK REG. U.S. PAT. OFF.

GUARANTEED SEEDS

ALFALFAS
SEED CORN
FIELD SEEDS

TWELFTH ANNIVERSARY
SPRING 1919

DAKOTA IMPROVED SEED CO.
MITCHELL, SOUTH DAKOTA

What is Disco GUARANTEED SEEDS

"**Disco**" is the Dakota Improved Seed Co. This Company was organized eleven years ago and has a paid up capital of forty-seven thousand dollars. It was organized for the purpose of growing and distributing reliable field seeds. The steady increase in volume of business is proof that it is performing that work to the satisfaction of its customers. The business has been built up on a basis of absolute honesty and fair dealing.

The superiority of Northern grown seeds is well established.

The "**Disco**" Company possesses a particular advantage in this respect because of its location.

Our seeds are grown for us in South Dakota by reliable growers under our supervision. In addition to these contract growers we own and operate over fifteen hundred acres of fertile land in the vicinity of Mitchell, S. Dak., from which is produced large quantities of field seeds. This tract is equipped with suitable warehouses for the storage and protection of our seeds.

Our warehouses are equipped with the most modern and improved cleaning machinery for the cleaning and preparing of field seeds. Our customers are assured that the seeds they secure from us are of the highest quality in every respect.

Your order will be handled with the utmost care and in nearly all cases we are able to make shipment the same day your order is received.

The "**Disco**" Company handle a full line of field seeds.

They specialize however on Improved early varieties of corn and on Hardy, Pedigreed and Registered varieties of Alfalfa.

Read this Seed Book carefully. It will be of interest to you.

Don't lose sight of the fact that **Disco Field Seeds** are always of the highest quality obtainable.

DAKOTA IMPROVED SEED CO.

By W. S. HILL, President and Treasurer

January, 1919.

Disco GUARANTEED SEEDS PRICE LIST Disco GUARANTEED SEEDS

January 1, 1919.

United States Food Administration License Number G-41870.

The prices given herewith are those in effect January 1, 1919, and as near as we can anticipate them for the season. **All prices are subject to market changes.** We invite correspondence on seeds where prices are likely to vary, or on any seed where large quantities are desired.

All prices quoted are **f. o. b. Mitchell, S. D.** Freight or express to be paid by customer. If delivered prices are required, write us and we will quote delivered prices. In ordering by **parcel post,** your postmaster will tell you in what zone from Mitchell you are located, so that your remittance will include the postage.

PRICES SUBJECT TO MARKET CHANGES. BAGS WEIGHED IN.

COMMERCIAL ALFALFA

Dakota Grown.	Per pound.
Disco Brand	$0.27
Emerald Brand	.25

Description on page 9.

DISCO REGISTERED ALFALFAS

	Per pound.
Disco 26	$0.27
Disco 28	.33
Disco 38	.31
Disco 79	.30
Disco 80	.29

The Registered Alfalfas are described on page 5.

DISCO PEDIGREED ALFALFAS

	Per pound. Lots up to 30 lbs.	Over 30 lbs.
Disco Grimm	$0.60	$0.55
Disco Baltic	.60	.55
Disco 19A (special selection of Grimm)	.70	.60
Disco 11C (special selection of Baltic) per pound		1.00

See pages 4, 6 and 7 for full description of these hardy alfalfas.

DISCO MILLETS

	Per 100 lbs.
Golden, 50 lbs. per bu	$7.00
Common, 50 lbs. per bu	6.50
Dakota Kursk, 50 lbs. per bu	7.00
Siberian, 50 lbs. per bu	6.75
Proso, 50 lbs. per bu	6.00
Hog or Broom Corn, 50 lbs. per bu	6.00
Early Fortune, 50 lbs. per bu	6.25
Japanese or Billion Dollar Grass, 36 lbs. bu.	6.00

See page 23 for full description of Millet.

SWEET CLOVERS

	Per pound.
White Blossom, hulled	$0.35
White Blossom, unhulled	.22
Yellow Blossom, hulled	.32

All hulled seed scarified.
See page 11 for full description.

DISCO CLOVERS, LIMITED QUANTITY

	Per pound.
Disco Brand Medium Red	$0.50
Emerald Brand Medium Red	.45
Disco Brand Mammoth Red	.50
Alsike	.40
White or Dutch Clover	.60

Described on page 24.

DISCO GRASS SEEDS

	Per pound.
Timothy	$0.15
Timothy, Alsike mixed, (⅓ Alsike, ⅔ Timothy)	.22
Timothy, Red Clover mixed, (⅓ Clover, ⅔ Timothy)	.25
Permanent Pasture Mixture	.22
Permanent Meadow Mixture	.22
Red Top, solid seed	.22
Kentucky Blue Grass, 21 lb. seed	.33
Slender Wheat Grass	.25
English Blue Grass or Meadow Fescue	.25
Perennial Rye Grass	.20
Crested Dogs Tail	.30
Orchard Grass	.35
Bromus Inermis	.32
Disco Lawn Grass	.35

Described on pages 25 and 26.

DISCO CANES

	Per pound.
Dakota Amber Sorghum Cane	$0.10
Fodder Canes	
Dakota Early Fodder Cane	.08
Southern Grown Fodder Cane	.07
Feterita	.08
Kafir	.08
Milo Maize	.08
Sudan Grass	.25

See page 21.

MISCELLANEOUS

	Per bu.
Swedish Select Oats	$1.25
Postia Imported Swedish Oats	1.30
60-Day Kherson Oats	1.20
Barley, Mansury	1.50
Barley, Oderbrucker	1.50
See page 27.	
Marquis Wheat	2.90
Kubanka Wheat	3.00
Durum Wheat	3.00
Turkey Red Winter Wheat	Write for prices
Speltz 42 lb.	1.65
See page 28.	
Spring Rye	2.65
Amber Winter Rye	Write for prices
White Hulless Barley	2.00
See page 29.	
Canada Field Peas	6.00
Soy Beans	6.00
Navy Beans	9.00
Seed Flax	5.25
See page 22.	
	Per 100 lbs.
Rape, per 100 lbs.	$15.00
Japanese or Silverhull Buckwheat	7.00

See page 30.

SEED CORN

Shelled and graded.		Price per bu
Riverview Special Yellow Dent	(Page 13)	$5.00
Disco Pride Yellow Dent	(See page 14)	5.50
Northwestern Dent	(" " 15)	5.50
Disco 90-Day White Dent	(" " 16)	5.00
Minnesota 13 Yellow Dent	(" " 17)	5.00
Disco Early Murdock Yellow Dent	(" " 18)	5.00
Wimple's Yellow Dent	(" " 18)	5.00
Disco White Flint	(" " 19)	5.50
Disco Gehu Flint	(" " 19)	6.00
Disco Squaw Flint	(" " 19)	6.00
Disco Early Fodder	(" " 20)	3.50
Disco Medium Fodder	(" " 20)	3.50
Evergreen Sweet Fodder Corn	(" " 20)	10.00

We do not send out corn unless our germination tests show 90% or better. Read our guarantee on corn found on inside of back cover.

DAKOTA IMPROVED SEED CO., MITCHELL, S. D.

W. S. Hill's Riverview Ranch.

Why Disco GUARANTEED SEEDS Guaranteed Seeds?

DISCO, guaranteed seeds are the words that should not be forgotten. They represent the highest possible standard of purity, germination and quality.

For the past twelve years this company has put forth every effort to bring the **DISCO, guaranteed seeds,** to the highest standard.

To accomplish this we have made use of the Riverview Ranch, which consists of 1,520 acres of fertile land located near Mitchell, S. Dak.

This is owned and operated by our President, Mr. W. S. Hill. Here is annually produced for seed purposes large quantities of corn, alfalfa, wheat, oats, millets and other crops.

The leading varieties of corn grown are the Riverview Special Yellow Dent, the **DISCO** 90 Day White Dent and an early type of Northwestern Dent.

These are grown from seed ears, which are carefully selected for type, quality and early maturity. The purity of the variety is assured by the isolation of the fields preventing mixtures.

The past year this tract of land has produced over ten thousand bushels of corn, more than seven thousand five hundred bushels of Marquis and Kubanka Durum wheat, five thousand bushels of Kershon 60 Day and Swedish Select oats, besides Proso millet and barley.

These are all grown under our direct control and management.

In addition a complete threshing and hulling outfit is maintained for exclusive use on this Ranch, thereby preventing the mixing of small grain.

Using the Riverview Ranch as the foundation of the **DISCO Registered Seeds** after having out-grown the trial plot spells s-u-p-e-r-i-o-r-i-t-y for the **DISCO, guaranteed seeds.**

This method makes the **DISCO, guaranteed seeds** a little above the ordinary seed. Therefore, to meet the additional expense of maintaining and securing **Pure, True Type** seed our goods command a little premium over the ordinary type of seed, but good seed is cheapest in the end.

DISCO Brand Alfalfas, Clovers, Timothy, and other **DISCO** field seeds are for those who want the best. They comply in every respect with the Pure Seed Laws of all the states.

Read the GUARANTEE on the inside of the back cover

Portion of Alfalfa Nursery at the Michigan Agricultural Experiment Station. Tl rows on the left of man standing in center are a number of Disco Alfalfas furnished · the station for trial in 1910. A strong contrast is here shown between the extreme hardy Disco Alfalfa and the tender common strains.

For a number of years we maintained a large alfalfa nursery plot, the same as your State Agricultural Experimental Station has. In this plot every conceivable variety of alfalfa was tried out. The special varieties or plants showing particularly hardy traits were again and again selected. These were given the most rigid tests. One test was to allow one-half of a plot to go into the winter with a growth to height of 8 or 10 inches. The other half was clipped close to the ground just before winter and was thereby unprotected.

Besides these tests in our own nursery, seeds from these alfalfas have been sent to the Government stations in practically every state in the Union and by them have been given thorough tests. As a result of these tests we have been able to select extra hardy and true-to-typ varieties, which we offer as **Disco Hard Dakota Grown Alfalfas.**

From some of these tests throug careful selection have come some of ou best pedigreed alfalfas. Seed of thes varieties is now grown for us in quai tities at Riverview Ranch and by grow ers under contract. The greatest care i taken to keep the variety pure and ou customers are assured of getting see true to type and description.

Disco Brand Alfalfa is all Dakota an Montana grown. It has proven superior ity in every test for hardiness and produc tiveness. These last two are very essen tial points. Therefore, on a basis o absolute fair and honest dealing we sc licit your orders for hardy Dakota an Montana grown alfalfa.

I bought some of your South Dakota grown alfalfa seed last spring and notwithstanding the dry season I have an excellent stand of alfalfa. The seed certainly was good. I also got some garden seed from you and they all grew fine and I shall send you another order next spring.

John Murtha, Woonsocket, S. D.

For Prices See Special Sheet Inside of Front Cover.

Three Famous Disco Alfalfas

Alfalfa or Lucerne

Only a few people are yet acquainted with this "Wonder Crop," Alfalfa, or the history of the plant.

Some of our greatest agricultural professors have made a life study of this plant and have written large volumes of books giving its history back for hundreds of years. This is most interesting and shows why an acreage of alfalfa should be maintained on every farm in the United States.

Going back as far as 490 B. C. we find its original home in Asia. The word Alfalfa is of Arabic origin meaning "The Best Fodder." The forefathers of this country realized the value of this plant, and during the sixteenth century alfalfa found its way into this country. Here alfalfa has made wonderful progress and the happy American farmer who is growing it rightfully calls it the "Wonder Crop of the World."

There is not a state in the Union in which alfalfa cannot be grown successfully. Alfalfa yields more hay per acre than Red Clover and its feeding value is far more than the best of clover.

Alfalfa will produce from three to eight tons of hay per acre. This hay when properly cared for contains more protein than wheat bran. It is fed with equal success as a part ration to all kinds of live stock on the farm, from the dairy cow to the hen. Horses, cattle, hogs, sheep and chickens thrive better, winter easier, produce a larger revenue, and come out in the spring in better condition when alfalfa hay is used as a part ration. The expense of maintenance is smaller and the results are highly pleasing.

Write for your free copy of "Growing Alfalfa Successfully." This tells you the cold facts about how to handle the "Wonder Crop of the World," **Alfalfa.**

I got some Grimm's hardy alfalfa seed from you last year which is doing fine.

J. E. McCoy, Hettinger, N. D.

For Prices See Special Sheet Inside of Front Cover.

Hardy Alfalfas

There is a vast difference between hardy alfalfa and just alfalfa.

If you have read page two of this booklet you will readily see how we determine which are the hardy varieties of alfalfa. Now these hardy strains or varieties of alfalfa are again divided into groups.

There are naturally two distinctive kinds of alfalfa. One of which is termed as common alfalfa, having one long tap root and the plant producing nearly a true purple and blue flower. There are hardy and non-hardy strains of the common alfalfa. For instance, seed coming from the South, in Kansas and Missouri will not stand the severe winters of the North. The southern seed may make a wonderful growth the first season, but on account of it being a non-hardy southern grown plant, the results are it winterkills, and a disappointed grower. The hardy Dakota grown seed has become acclimated to the rigid winters of the North. It is grown in a territory with a wide range of temperatures and a small amount of moisture and must be hardy to survive. From this variety comes the **Registered Disco Alfalfa.**

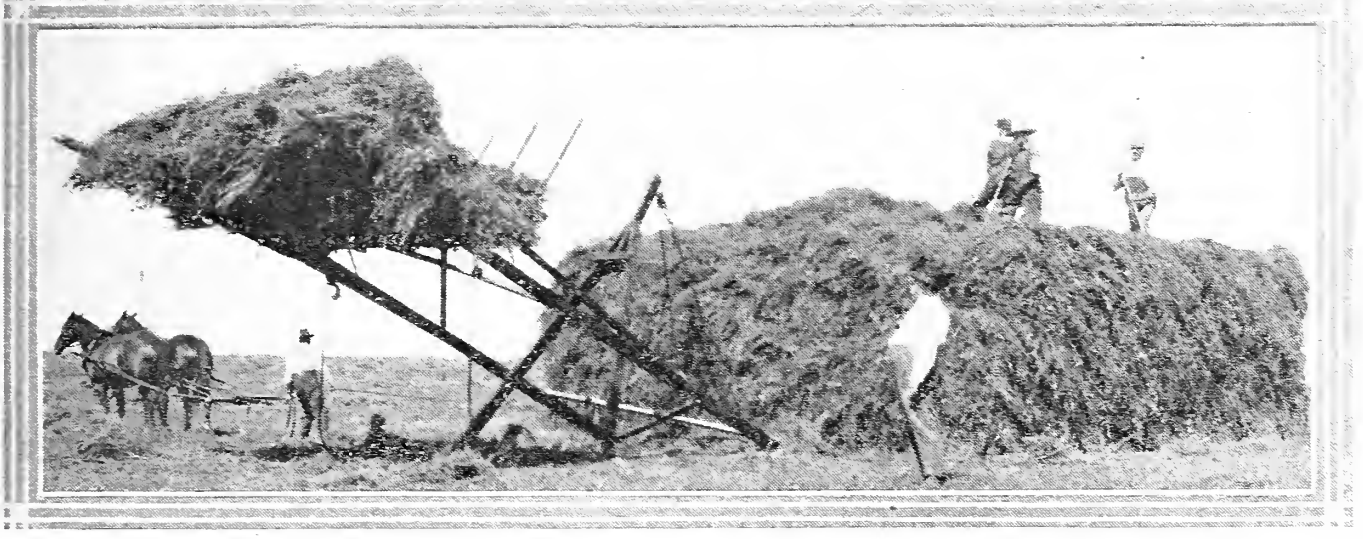
The second distinctive variety of alfalfa is commercially known as the Variegated alfalfa. This variety has a variegated blossom and a branch or spreading root system. The crown of the plant is naturally larger and grows more underground. There are many different strains of this variety. The hardiest of all and without a doubt the best and most favorably known strains are the Grimm and Baltic alfalfa. These are known the world over as being the hardiest alfalfas in every respect. They have an immense spread of crown underground buds protected by the soil and crown in such a way as to withstand the severe winter weather without a snow covering. The wonderful branched or spreading root system enables it to stand the heaving of the ground from frost in the spring—enables the plant to draw more moisture in dry seasons—makes a more desirable plant to grow on land where the water level is too high for common alfalfa.

In fact, the Grimm and Baltic alfalfas with their special selections are the hardiest, most desirable, most productive strains of alfalfa to be had.

On page 7 further description of Grimm and Baltic alfalfas will be found.

You are sure to get the Genuine Grimm and Baltic alfalfa when you buy the **Disco Brand Grimm and Baltic.**

For Prices See Special Sheet Inside of Front Cover.



Registered Alfalfa and Why

Sow 10 to 12 lbs. of seed per acre.

The **"Disco Registration System"** enables us to trace each individual strain of alfalfa to a definite single origin. By so doing only the most desirable native or acclimated stocks are **Registered.**

It is just as important to know the kind of alfalfa you plant as it is to know the kind of variety of grain you sow.

Alfalfa lasts for several years (if you sow **Disco Registered Alfalfa Seed)** while grain is merely a one year crop.

In order for alfalfa to come under the **Established Registered** heading it must have a known record of growth for ten years or more in the Dakotas or under equally severe conditions. Many of these **Registered** stocks have records of twenty-five years or more. This means the plant and seed are acclimated, and that you are not taking the chances of losing your crop by winter-killing when you buy **Disco Registered Alfalfa.**

A seeding of **Disco Registered Alfalfa Seed** will produce the desired results with a lesser amount of seed. Ten to twelve pounds per acre of the **Registered Alfalfa** invariably will give you a greater return than fifteen to twenty pounds of ordinary seed.

The advantage to buyers of **Registered Alfalfa Seed** is apparent. For example: you purchase some of our registered seed and sow it, you get fine results. You would like to get more of the same kind.

By means of our registration system and our method of keeping a careful record of all orders, and even though years have elapsed we are able to send you the same kind of seed.

Registered Alfalfa Well Established

Disco No. 28 alfalfa without a doubt, heads the list of registered seed. It has been grown in southern Meade and Pennington counties, South Dakota, for over thirty years, under most adverse conditions as to severe cold and drought.

Some of the old fields are still producing excellent crops. It is a strong grower developing a very strong crown and prolific plant. There is a very much increased demand for this seed every year. "Once Used Always Used" are the sentiments of the purchasers of **Disco 28.** Our stock of this seed is rather limited this year but is of good quality.

Disco No. 38 is a close rival of **Disco** 28. It has been grown in western Meade and Southern Butte counties for over twenty-five years. We have distributed large quantities of this seed and especially favorable reports have come from Oregon and other extremely Western states where it is being used in drier regions without irrigation. You won't go wrong if you use **Disco** 38. The quality of the seed is fine.

Disco No. 79 ranks well for third place. It is a native alfalfa of the Black Hills region having a known record of over twenty years. Comes from the same locality as **Disco** 28, and is doing well all over the country. It is a wonderful producer of both hay and seed.

Disco No. 80. This stock is a native of Jones and Lyman counties, South Dakota. This alfalfa is both drought and cold resistant to a marked degree. The acreage of this strain is rapidly increasing. We have a large stock of this seed on hand, which is of good average quality.

Disco No. 26 is probably of Turkestan origin. It has been grown in the northern half of Meade and southern half of Perkins counties, South Dakota, for the past fifteen years. It has stood the test and ranks well with the other registered alfalfas. Our stock of this seed is small, but of fair average quality. A good buy for the money.

For Prices See Special Sheet Inside of Front Cover.

Disco Pedigreed Alfalfa

The work of developing **Pedigreed** strains of hardy alfalfa was begun by Prof. W. A. Wheeler at Brookings and Highmore Stations, South Dakota, in 1904. As the result of this work there has been produced a number of strains of alfalfa that show a decided superiority over the common alfalfas as well as over the parent stocks from which the pedigreed strains were selected and developed.

This work of special plant selection and the breeding of pedigreed alfalfas was the first of its kind in the country. In fact, we know of no other commercial organization in the world conducting the kind of investigational work with alfalfa that we have done.

These pedigreed strains represent selections from the first to the seventh generations. Practically all of them trace back to the parent stock of **Disco Grimm** and **Disco Baltic** alfalfa, but have developed remarkable records of hardiness and production.

DISCO 11C.

From the Baltic—**Disco** No. 11C has proven itself to be the hardiest of the hardiest. This strain is a revelation in perfectly hardy alfalfas. It is drought resistant to a marked degree. Recovers quickly after cutting. An exceptionally large and free stooling plant yielding an abundance of leafy hay. For seed production it has a record of its own. On one acre where **Disco** 11C was seeded in rows three feet apart it produced in 1917 two hundred and eighty-six pounds of seed.

This alfalfa is no longer an experiment. Its native home was on the plains of South Dakota. It is acclimated and is making a great reputation wherever given a trial.

If you want a field of alfalfa that is the talk of the country, a field that will produce you more than the ordinary amount of hay, a field of the hardiest alfalfa known, sow a few acres of the **Disco** 11C.

DISCO 19A.

Disco Grimm is good. You can bank on that, but the **Disco** 19A, a special selection from the Grimm, excels its parent plant in many ways.

From the hundreds of individual trials carried on in our alfalfa nursery there were selected plants, which stood out distinctly as being heavy seeders, erect and strong in habits of growth and producing many leafy branches. Plants with a large productive crown, underlaid with a strong and spreading or branched root system. By special selection of this type of plant we have developed the worth while pedigreed stock of **Disco** 19A, an alfalfa strain with a known parentage.

This pedigreed selection from the famous Grimm alfalfa has probably been tested at more experiment stations in a greater number of states and over a wider area than any other strictly pedigreed alfalfa tracing back to any individual plant selection.

From a large percentage of these trials we have had full reports on **Disco** 19A and other alfalfas with which it has been tested. So far as reports have been received, **Disco** 19A has never been surpassed for hardiness or production of either hay or seed.

The demand for this extra hardy and prolific strain of alfalfa is rapidly increasing. We have a large stock of seed from this excellent pedigreed strain. It is going to move out rapidly. Get your order in early for what you need.

For Prices See Special Sheet Inside of Front Cover.

Grimm Alfalfa, Survival of the Fittest

The history of the Grimm Alfalfa is a very pretty story.

Some sixty years ago Wendelin Grimm and his wife were immigrants in this country from Germany. In their fatherland Mr. Grimm had been growing alfalfa and realized the vast importance of the crop. When they started out in their search for a new home they carried with them some twenty pounds of the famous alfalfa seed. This they planted at their new home in Carver County, Minn.

There were not a few mishaps and difficulties met with, but Mr. Grimm, being a very thorough and careful man, succeeded in mastering these difficulties. He found the soil condition different from his former home, as well as different weather conditions.

These conditions had a great deal to do with the increased amount of difficulties he encountered when trying to establish his alfalfa field. It was nip and tuck for several years, but after about eight or nine years he succeeded in getting his first real seed crop.

A few years later some of the common type of alfalfa had worked its way into Minnesota only to be entirely killed out three years out of five. By this time Mr. Grimm had his field of alfalfa well established so the severe winters and hot, dry summers had no effect on it. This showed up the real worth of the hardy Grimm type.

Being a perfectly hardy variety the acreage has rapidly increased, although it was not until about the year of 1900 when this variety received its first publicity from the Minnesota Experimental Station.

At the present time there is a good acreage of the genuine Grimm alfalfa grown. The growers are very enthusiastic over its extreme hardiness and wonderful productiveness.

The following is an extract from the Farmers' Bulletin, No. 757, entitled Commercial Varieties of Alfalfa: "On account of its superior hardiness, Grimm alfalfa is particularly recommended for the northern part of the Great Plains region and all parts of the Northwest. It has also proved better able to survive the winters in the colder portion of the humid section of the country where winter killing is a serious factor. The supply of seed on the market is still rather limited and commands a high price. As a result unscrupulous dealers have offered for sale large quantities of common alfalfa under the name of Grimm."

Be wise. Keep this in mind. Purchase only the northern grown genuine Grimm alfalfa seed if you want to be fully satisfied. Being specialists in this line you can absolutely depend on getting the genuine Grimm when you buy **Disco Grimm.**

Disco-Baltic Alfalfa

A comparatively new variety of hardy alfalfa, very similar to Grimm, and rapidly being established in the esteem of all growers.

In describing the Baltic alfalfa, the authorities of the U. S. Department of Agriculture, Bulletin No. 757, have this to say: "While the Baltic differs slightly from the Grimm, in some minor details, the two are so similar that it is seldom possible to distinguish one from the other. This variety is recommended for sections where the ordinary strains suffer considerable loss through winter-killing. This includes practically the same territory to which the Grimm is adapted, that is, the New England States, the greater part of New York, Michigan, Wisconsin and Minnesota; the northern Great Plain states and the northern part of Pennsylvania, New Jersey, Ohio, Indiana, Illinois and Iowa. As in the case of Grimm alfalfa, the quantity of Baltic seed produced in the United States is rather limited and the same precautions are necessary in purchasing it."

The article on page 8, written by Mr. A. C. Dillman, in charge of the United States Experimental Farm, at Newell, South Dakota, gives some authentic data and information regarding this variety. This article is proof of the hardiness and productiveness of the Baltic alfalfa.

The Dakota Improved Seed Co. was the promoters and breeders of the Baltic alfalfa. Therefore, when you place your order with them for this variety of alfalfa, you can rest assured you will get the original **Disco-Baltic** alfalfa seed.

For Prices See Special Sheet Inside of Front Cover.

A Test of Alfalfa in Western South Dakota

By A. C. Dillman.

COMPARATIVE YIELD OF ALFALFA VARIETIES AT NEWELL, SOUTH DAKOTA.

Variety	Seed-Pounds per Acre (1)				Hay-Pounds per Acre (2)			Total Hay Tons per Acre
	1914	1915	1916	Total	1914	1915	1916	
Common (Kansas)	142	18	78	238	782	5850	2395	4.5
Turkestan		15	90	105		5830	2535	4.2
Canadian Variegated	166	60	80	306	900	6670	2490	5.0
Grimm	167	98	88	353	894	6570	2585	5.0
Cossack	110	45	70	225	795	7030	2650	5.2
Baltic	186	102	142	430	994	7550	2880	5.7
Yellow-Flowered ...	11	22	31	64	477	5940	2935	4.7

(1) Yield of one plat of each variety each year.

(2) Average yield of three plats of each variety each year.

The following are extracts from an article which appeared in the March 1st, 1918, issue of the Dakota Farmer, published at Aberdeen, South Dakota, which was written by Mr. A. C. Dillman, who is in charge of the U. S. Experimental Farm, near Newell, South Dakota.

"During the past eight years many tests of alfalfa have been made at the U. S. Experiment Farm, near Newell, South Dakota. This farm of 360 acres is located in Butte County. The soil, locally known as 'gumbo' is derived from the Pierre Shale and is at times as 'greasy' and at other times as dry as any one could desire. The average annual rainfall is here about 14 inches; the lowest record at the Experiment Farm was 6.6 inches in 1911, and the highest 21 inches in 1915."

"A TEST OF ALFALFA VARIETIES."

"In 1914 a test of seven varieties of alfalfa was begun to determine if there was any difference in the drought resistance or better, the adaptation to drought, of these varieties. The varieties selected were Common as represented by seed from Kansas, Commercial Turkestan, Canadian Variegated, Grimm, Cossack, Baltic and Yellow-Flowered Semipalatinsk (medicago falcata). Each variety was planted in a plat of three rows, eight rods long and the entire series of plats was repeated twice, giving three plats to each variety. In addition there was a fourth replication harvested for a seed test. The rows in all cases were 3½ feet apart and the plants were thinned to one foot apart in the row so as to give a uniform stand among all varieties.

"Each row in the test was cut with sickles by hand and the forage weighed immediately while green, in order to eliminate all error which might arise from careless harvesting and drying. Samples were dried to determine the percent of dry hay.

"The seed test being based upon a single plat of each variety, is not at all conclusive but is given merely as suggestive. It will be seen (1) that the Baltic variety gave the highest yield in each of the three seasons and (2) the Yellow-Flowered gave the lowest yield except in 1915.

"A small crop of hay was secured from all varieties in 1914 except in the case of the Turkestan variety. This variety was kept eaten down by jack-rabbits most of the season and was not harvested. No such selection by rabbits was observed in 1915 or 1916 when green feed was more plentiful. Three crops were cut from all varieties in 1915 and two crops in 1916.

"It will be seen from the Table (1) that the Common and Turkestan varieties gave about the same yield of hay. (2) The Canadian Variegated, Grimm and Cossack yielded the same, within the probable error of the experiment, and (3) the Baltic in this test, at least, was somewhat superior to other varieties. The Yellow-Flowered alfalfa produced a large first crop in both 1915 and 1916 but very light crops later in the season. Its prostrate habit of growth makes it a poor type for hay purposes in its present state of development.

WINTER HARDINESS.

"A careful count of the winter killing of plants was made in all of the rows in the experiment. The total winter killing in the two winters, 1914-1915 and 1915-1916, was as follows: Common, 16%; Canadian Variegated, 11%; Cossack, 7%; Baltic, 5%; Grimm, 4%; Turkestan, 1% and Yellow-Flowered 0%.

For Prices See Special Sheet Inside of Front Cover.

A Test of Alfalfa in Western South Dakota by A. C. Dillman—Continued.

WHAT VARIETY.

"The question is often asked by farmers in the northern Great Plains region, 'What variety of alfalfa shall I plant?'

"A good answer to this question can be found in Farmers' Bulletin No. 757, 'Commercial Varieties of Alfalfa,' by R. A. Oakley and H. L. Westover. (This Bulletin can be obtained free by application to the Secretary of Agriculture, Washington, D. C.) 'Grimm and Baltic alfalfa are now very well distributed throughout the territory where hardy alfalfas are required and seed of these varieties can generally be bought at reasonable figures. This being the case farmers in this region should think twice before paying a much higher price for seed of other varieties which have not been shown by actual test to be superior.' "

Commercial Alfalfa Seed

The term "Commercial Alfalfa Seed" is used in connection with the common Dakota grown alfalfa seed which does not come under our headings of registered or pedigreed alfalfas. Samples of the commercial alfalfa seed are marked South Dakota Alfalfa.

Dakota grown alfalfa seed has become recognized by the leading seed men as a distinct type. It is also a very popular variety with the experiment stations throughout the country. This fact is due to several things: the weather conditions in this state are usually ideal for seed production; the rigorous variations as to heat and cold making a very hardy product. Ranchers of this state and especially those west of the Missouri river have combined the culture of alfalfa with live stock, many of them maintaining vast fields for hay and seed, and many of these fields have been long established.

Dakota alfalfa seed has made an enviable reputation in the northern states because of its general hardiness. Seed from this state being much higher priced because of the additional value coming from greater hardiness.

We especially recommend Dakota alfalfa for northern planting and are specialists in this line. This seed not only comes from fields long established, but from altitudes varying from two to three thousand feet and from semi-arid regions. The plants are compelled to undergo a natural selection or the survival of the fittest, and the seed has inherited the tendency to become vigorous to a very marked degree. There is absolutely no questioning the past performance and the present worth of Dakota alfalfa.

Our Grades of Commercial Alfalfa Seed

Care is used in the purchase of our commercial stocks of alfalfa. In cleaning and milling process two grades are established—our **Disco** brand and the Emerald brand. We might quote on one grade only by blending the two grades but prefer to keep the highest possible grade as our **Disco** brand, which must meet the requirements of any state or national test, be clean, plump seed, of good color, according to the season, and of high germination.

The Emerald brand is a very good grade and usually an excellent business proposition, in fact, is equal to the best grade often sold. The difference between the real value of this and the **Disco** brand is often only one of appearance instead of a real difference in quality.

You always get your money's worth when you buy the **Disco** or Emerald brand —South Dakota alfalfa.

Purity---Germination Insurance

All our stocks of seeds are sampled to the State and United States seed-testing laboratories before shipping. The results of these tests are used as a basis for the report on the purity and germination tag which is attached to every shipment of **Disco** and **Emerald** brand field seeds.

These tags cover the requirements of the seed laws of all the States. Every purchaser is thus assured of an accurate statement of the quality of his seed.

For Prices See Special Sheet Inside of Front Cover.

Essential Points in Growing Alfalfa

1. Select a well drained, well prepared, well settled seed bed, the richer the better.

2. Be sure the seed is hardy, well cleaned Northern grown seed. Don't use seed from unknown or questionable sources.

3. Caution: Be careful not to cover the seed too deep. From ½ to 1 inch is sufficient. In drilling in BE CAREFUL. In sowing broadcast, harrow lightly.

4. Seeding may be done any time from April to September. Using from 8 to 20 lbs. of seed per acre.

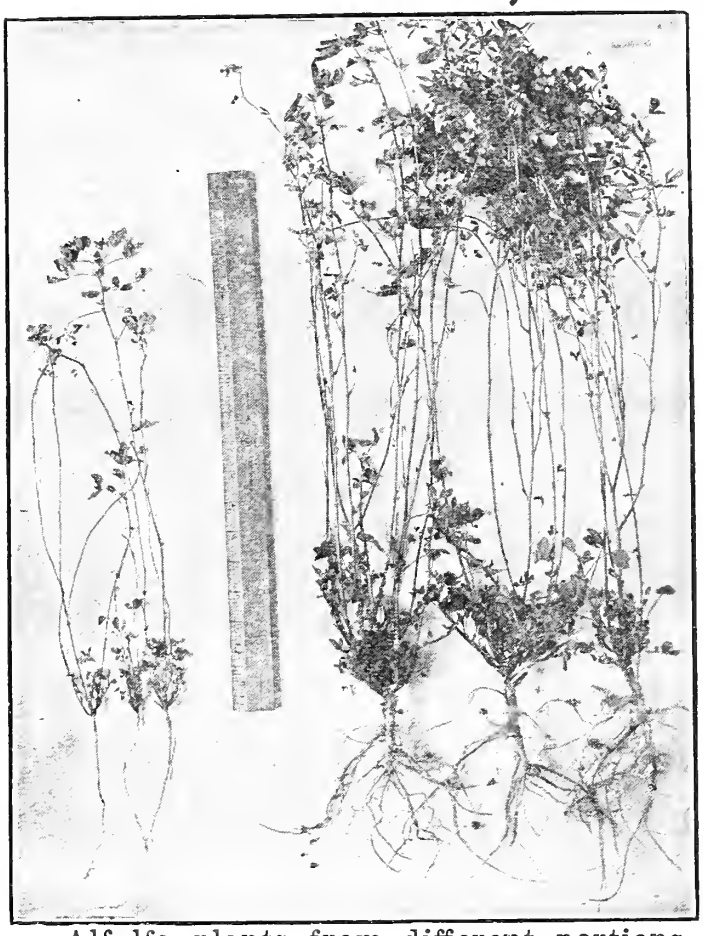
5. Much good may be derived from adding lime to the soil and inoculating the seed. In many localities both are necessary. In this state it is not practiced to any extent. So do not become confused in thinking the culture of alfalfa requires a college education.

6. Best to treat an alfalfa field with care when it comes to pasturing the first year. Wait until the seedbed is well firmed and the root system well established.

7. Don't give up. Many well known growers have succeeded only by staying with it.

Our Manual "Growing Alfalfa Successfully" treats further on these topics. Write for your free copy.

It Pays to Inoculate Alfalfa



Alfalfa plants from different portions of the same field, those on the right from seed inoculated with Legume Bacteria Culture, those on the left from the same kind of seed not inoculated. The ruler is 18 inches long. Notice the stocky growth, the thick, sturdy roots, and nodule clusters on the inoculated plants as compared with the weak growth of the others.

All authorities on the subject advise inoculation of the seed or of the soil by various methods. It is rather costly to inoculate the soil, considering the labor in transporting the soil from a neighbor's field and spreading it over the soft seedbed. It is so much easier to treat the seed rather than the seedbed, either by the Glue Method or better yet, with a pure culture, at a cost of from 20c to 30c per acre, depending upon the amount of seed sown.

Inoculation places the nitrogen-fixing bacteria where they are needed and absolutely necessary for a perfect stand. In old alfalfa growing districts that are fitted naturally for the growing of alfalfa the soil already containing lime and bacteria, further expense in this regard is useless. This condition prevails in much of western South Dakota, and in fact, a large portion of this state and many other western states. In most of North Dakota, Minnesota, Iowa, Missouri, and states east of these, very marked results are often secured from inoculation by pure culture.

We carry in stock only pure cultures from alfalfa put up for us in the most approved form by prominent bacteriologists, and can be relied upon to accomplish the desired results.

Prices: Culture for one bushel or 60 lbs., $1.20. Five cultures or enough for 300 lbs., $4.50.

Forest City, Ia.
Jan. 7, 1918.

Gents:
The Iowa State College referred me to you for genuine Grimm alfalfa seed.
Yours resp.,
Hans J. Helvig.

Fowlerville, Mich.
Dec. 29, 1917.

Dakota Seed Co.,
Mitchell, S. D.
Gentlemen:
Our Agricultural College referred me to you as a reliable firm where Grimm alfalfa can be obtained.
Yours,
H. G. Aldrich.

For Prices See Special Sheet Inside of Front Cover.

Sweet Clover no Longer a Despised Weed

Sow from 12 to 20 lbs. per acre.

For many years we have observed sweet clover, melilotus or bee clover, as it is often called, growing voluntarily under adverse conditions, by the roadside, in fence corners, along the ditches in irrigated sections and on unoccupied lands in nearly every state. It has been commonly considered as a weed and a great nuisance but in spite of the prejudice against it, and misunderstanding regarding its agricultural values, many experiments conducted within comparatively recent years to ascertain its adaptability, feeding value, and effect upon the soil have quite definitely determined its importance as a farm crop.

White blossoms (melilotus alba) is a biennial, that is, lives but two years unless the seed crop at the end of the second year is allowed to form and scatter. For this reason, sweet clover is well adapted to fit into crop rotation. Many prefer the white blossom variety because it is a very rank grower and excellent for pasture. There are those, however, who will sow only Yellow Blossom (melilotus officinalis) claiming for it earlier yields, a finer quality of hay and the seed is usually lower in price.

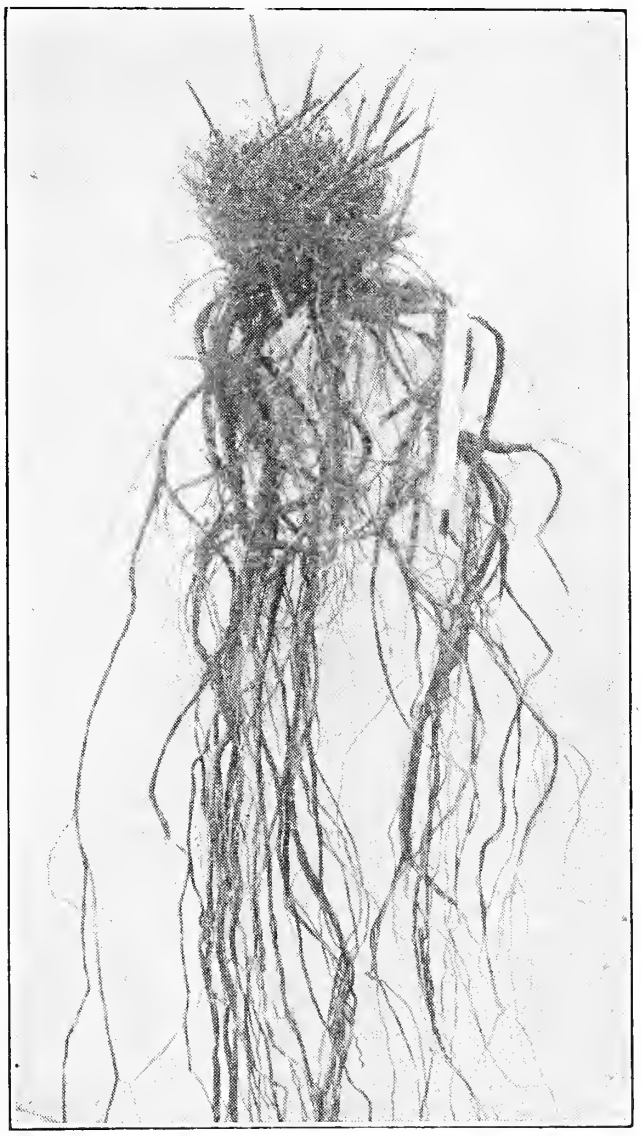
Its adaptability to soil and climatic conditions are particularly a strong feature in its favor. It will endure greater extremes of temperature and grow on soils too poor for alfalfa and under conditions where other grasses failed to produce a crop before it.

For an all-around money crop, hay crop, pasture crop, or soil-builder, sweet clover is a wonder. Therefore, before you condemn it, consider the following facts:

1. It is not a weed.
2. Like alfalfa it is rich in protein.
3. It will not bloat cattle or sheep.
4. Equal to alfalfa for pasture.
5. It is a great milk-producer.
6. Furnishes early spring pasture.
7. Fits well in crop rotation.
8. Is a great soil enriching crop.
9. Is a valuable plant for honey-bees.
10. Prepares the soil for alfalfa.
11. Roots are soft and give no trouble in plowing.
12. Roots being tender become inoculated more readily than alfalfa.
13. Never damages cultivated crops.
14. Its roots decay rapidly adding much nitrogen and humus to the soil.
15. Grows and will produce a crop in all parts of the United States.
16. Seeds freely in both humid and dry sections.
17. Will grow under conditions where clover and alfalfa fail.

(a) On land too low, too wet or too alkali for alfalfa.

(b) On land too hard and compact for alfalfa.



Note Extensive Root System.

(c) On soil too poor for alfalfa, especially where there is no lime.

Credit is due Mr. P. G. Holden, Director Agr. Ext. Dept., I. H. C. of New Jersey, Harvester Bldg., Chicago, for the above facts.

Use a nurse crop or not with sweet clover. Sow very shallow in a well prepared seedbed. Early spring—even when there is a light skiff of snow on the ground is the best time to sow sweet clover.

SCARIFIED SEED.

Scarified Seed. Probably there are more hard seeds found in sweet clover than in other clovers or alfalfa. This percentage can be greatly reduced and the actual percentage of germination by test brought up a great deal by scarifying the seed. We have found from experience that scarifying sweet clover seed is so valuable that we are scarifying all our hulled seed, for which we make no extra charge. For spring seeding, scarified seed is much safer to use than unscarified.

For Prices See Special Sheet Inside of Front Cover.

Disco Early Varieties of Seed Corn

For Northern Planting.

1 bu. will plant 7 to 8 acres.

There is a vast difference between seed corn and **Disco** seed corn.

Extra early varieties of seed corn, especially for territories where from 85 to 95 days constitute the corn-producing period.

Being located as we are in the heart of the corn producing high land section of South Dakota, there is no one better equipped to supply you with the extremely early varieties of Dent corn than the Dakota Improved Seed Company. For more than ten years we have been producing early corn for the country north of us. Their results with the **Disco** seed corn have been highly satisfactory.

During the spring of 1918, **Disco** seed corn was in strong demand in Minnesota, Iowa, Wisconsin and Illinois, in fact, on through Michigan and New York state. Favorable reports from growers in these states have been received which speak for the superiority of the **Disco** seed corn.

Besides growing large quantities of these early varieties of corn, on our Riverview Ranch, located in Hanson County, South Dakota, we have large acreages grown under our direct supervision in Davison and Aurora Counties. These are such varieties as **Disco** 90 Day White Dent, **Disco** Pride Yellow Dent, Northwestern Dent, Minnesota 13, Riverview Special, Early Murdock, and Wimple's Yellow Dent, besides many varieties of Flint corn. Therefore, it is not necessary for us to go to points south of us for our supply of seed corn, which, naturally, would not be as early. These contract fields are planted with our special ear selected seed corn. In this way we preserve the type, earliness and yield.

The Seed Corn Situation

This year South Dakota has had a bumper crop of corn. Our contract corn was all ripe and starting to cure nicely when the first frost came on September 17th, 1918. The results are that never before have we been better supplied with good quality of high germinating early varieties of seed corn. This corn was delivered to our drying house early and is in the prime of condition.

Last year, 1917, the corn was in such a critical condition that it was almost necessary to plant whatever corn was available that showed a good germination. Now, this year the tables are turned. You have the opportunity to get the variety you desire.

Order Early

The railroad congestion is not entirely relieved. They are still short of help. Shipments are often delayed. It is our desire to make prompt delivery of all orders. You can be of help to us by placing your order early.

Mt. Vernon, S. D.
I bought seed corn of you this spring and was well pleased with it. In cultivating, I could tell to the row where I started with your seed.
E. R. Smart.

Piedmont, S. D.
Your seeds have always been the best I could get anywhere and the seed corn has been fine. Your Brown County Yellow Dent is, I think, the best corn I have tried for the Black Hills country.
E. D. Smith.

For Prices See Special Sheet Inside of Front Cover.

Riverview Special

Without a question Riverview Special is one of the best 90-day yellow dent varieties of corn offered on the market. It has been developed, not for the largest type of corn but for the hardy characteristics which predominate. The ears will average 8½ inches in length with a girth of 7 inches, with 16 to 18 rows well carried out at butt and tip. The shelling percentage of this corn is around 88%. The dent is on the dimple order, pronounced and yet not too rough. The color is a rich yellow, grain moderately deep, and of smooth handsome appearance. The ears are well formed, uniform and with a moderately strong shank. The field characteristics are in its favor with leafy stalks, which attain a height of 7½ to 8 feet, with numerous brace roots. Yields of from 40 to 60 bushels per acre are not uncommon.

Riverview Special thoroughly matures in 90 days but 95 days will perhaps be a safe average. This makes an all-around dependable variety of corn where early frosts are common. The southern half of South Dakota, Minnesota, Wisconsin and Michigan and the north half of Iowa and Illinois cover fairly well the territory best suited for Riverview Special. It may also be used to advantage to drill in early in June for ensilage or fodder. Three large silos are filled on Riverview Ranch each fall with Riverview Special. It fills the bill and suits us as well as our customers from whom we have numerous testimonials on file. We have a large supply of this corn on hand, showing a good germination. You will not be disappointed if you order Riverview Special.

Oacoma, S. Dak.
Dakota Improved Seed Co.,
Mitchell, S. Dak.
Gentlemen:

I am inclosing an order for seed which you may forward by express to Oacoma, S. Dak.

I wish to state that the seeds which we purchased of you last year were very satisfactory indeed. They were true to name and all lived up to their germination test.

Very truly yours,
J. A. Wheeler.

For Prices See Special Sheet Inside of Front Cover.

Disco Pride Corn

An Improved Strain of Brown County Yellow Dent

Disco Pride.

In 1906 we first ran across a variety of corn in Brown County, So. Dak., which had made a good record for yield and earliness. It has been grown there and has matured satisfactorily every year for the past eighteen or twenty years. It has been tested at the Highmore Experiment Station where it yielded between forty-five and fifty bushels per acre. In 1907, at the same experiment station, this corn outyielded all other varieties and showed a drouth resistance second to none. In fact, there was no corn at the Highmore station in 1907 that was nearly equal to this in resisting dry weather. In type it resembles the Pride of the North and North Dakota Golden Dent.

The original stock of Brown County Yellow Dent as we secured it in 1906 had not been selected for uniformity of type or color. The improved strain which we offer as **Disco** Pride shows a great improvement over the original. It retains the extreme earliness of the original strain, but has a better type of ear. There is still some variation in color and shape of kernel, but this does not injure it in any way when it comes to producing a good yield of corn under adverse circumstances. We believe that the **Disco** Pride corn planted in the northern part of South Dakota, North Dakota or Montana is as safe a proposition as anything in the way of corn that can be secured. Corn-growing in Montana is just in its infancy. We have been furnishing this variety of corn to our Montana customers for several years and have the most favorable reports from it.

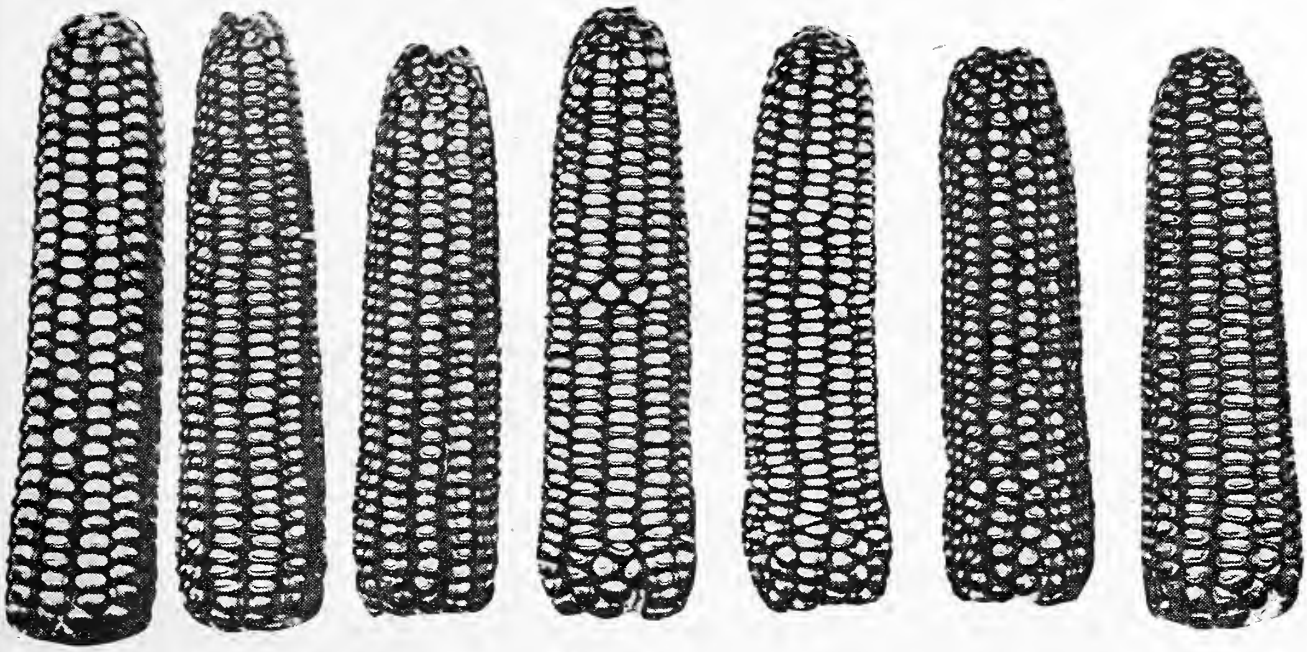
One of the strong features of **Disco** Pride is the deep kernel and small cob, which makes this variety shell more corn in proportion to the size of the cob than most other varieties grown in the West.

We have a good stock of Davison County, So. Dakota, grown **Disco** Pride on hand this year. This corn is good type, good germination and an ideal corn for northern territory.

For Prices See Special Sheet Inside of Front Cover.

Northwestern Dent

Earliest of all Dent Corn



Northwestern Dent.

This corn is the result of a cross between an early yellow dent and a red flint, producing a type suitable for northern North Dakota, Minnesota and Montana. In fact it has ripened in Canada where even early sweet corn is an uncertainty.

In North Dakota this corn is grown perhaps more largely than any other one variety. It is extremely early and hardy in North Dakota and northern South Dakota. No other variety seems to have given the uniformly satisfactory returns in North Dakota in comparison with Northwestern Dent.

It is extremely early and readily adapts itself to various soil and climatic conditions. While on record as having matured a crop in less than 80 days, it is safe to count on the Northwestern Dent as maturing in 85 to 90 days, and when conditions are very favorable, even earlier.

The stalk is smaller and shorter than some of the later varieties attaining the height of 7 feet on an average. The ears are well formed, well up on the stock. The size of the ear is remarkable, all things considered. They will average 8 inches in length with 14 rows of kernels. In yield Northwestern Dent is a sure cropper and a worth-while variety, both for the extreme Northwest and for the Corn Belt.

For the Corn Belt, this early variety fills a very useful place in the early feed list. A few acres of Northwestern Dent planted along with the main season crop will produce an abundance of early feed, fully two to three weeks in advance of the later varieties. For early hog feed and especially for hogging-off, with rape sown between the rows at the last cultivation, Northwestern Dent is a very popular variety.

Under unfavorable spring conditions, when replanting is necessary, Northwestern Dent will deliver the goods. Under ordinary conditions this corn will ripen before the hot drying conditions of midsummer prevail. It is in truth a drought resisting variety.

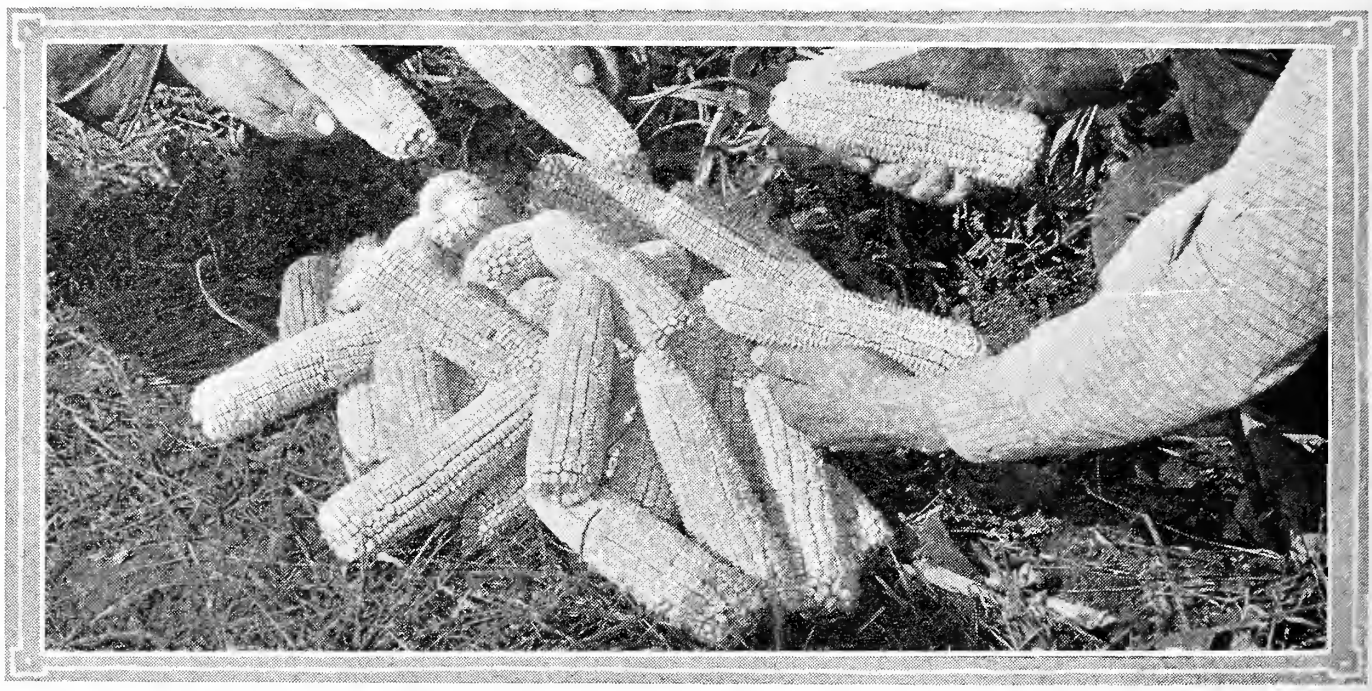
In order for us to maintain the earliness of this variety we have our seed stock grown for us year after year in North Dakota.

The seed we are offering this year is from that source. In buying Northwestern Dent from us you are sure to get the early maturing kind.

For Prices See Special Sheet Inside of Front Cover.

Disco 90-Day White

Equal in quality, yield and fully as early as Minn. 13. It is especially valuable for silage purposes having a leafy stalk.



Disco 90-Day White Dent.

The **Disco** 90-day White Dent Corn has met the approval of more growers of White Dent Corn than any other strain of White Corn. For early ripening, great yield and compact growth of ears, it is one of the best. Besides being early the ears are good size and the kernels deep and well shaped. **Disco** 90-day White is admirably adapted to a northern climate. The stalks attain an average height of about 8 feet, while the ears shoot out at about 3½ feet from the ground.

The above photograph shows the hands of two well satisfied growers of **Disco** 90-day White. Note the type of ear they are selecting for seed. Such corn as this can easily be recommended for Northern Iowa, Illinois, Central South Dakota, Minnesota, Wisconsin and Michigan. It will undoubtedly mature north of this line, with care, the first season in saving the seed until it is acclimated to a more northern season. We have an excellent stock of specially selected 90-day White. Get your orders in early for the extra select stock.

Kadoka, S. D.

Disco 90-day White Dent corn is the earliest and the best drought resister I have seen. Your seeds are the best I used this year and I like your way of doing business better than most seedsmen.

Lewis Stephens.

Kennebec, So. Dak.

This is my third year sending for my seeds from your company, and can say that I have been more than pleased with all the seeds I have ordered, for I do believe that every seed which I planted from your house have grown. I shall use no other as long as I can get your seeds.

Yours sincerely,
Mrs. Henry L. Peyton.

For Prices See Special Sheet Inside of Front Cover.

Minnesota No. 13 Corn

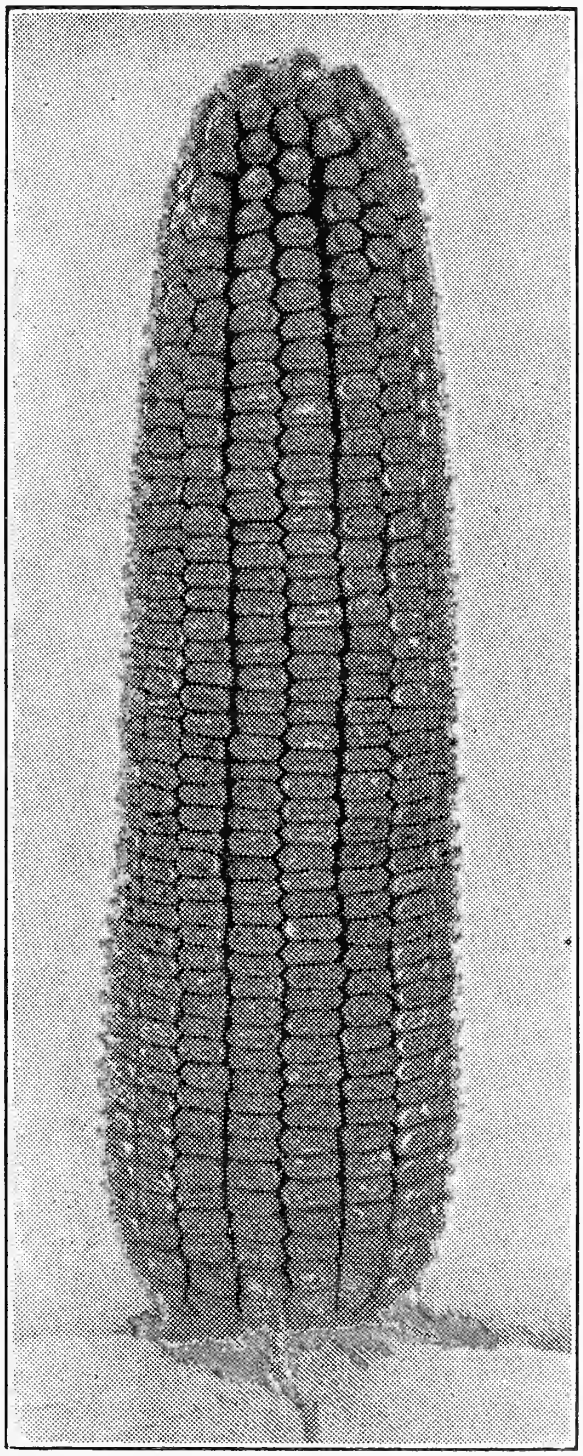
Since its introduction by the Minnesota Experiment Station in 1896, Minnesota 13 has been distributed across the United States and is well known everywhere as an early, worth-while yellow variety of corn. It is considered to be the best early yellow type; ears larger in size than Pride of the North as produced in the Corn Belt, and fully as early.

In yields, records have been attained as high as 90 bushels on clover sod. In Minnesota and the Dakotas the average is close to 50 bushels, which is very conservative.

The ears contain 16 to 18 rows of rich yellow grains, have a good shelling percentage, well filled butt and tip and a small shank in favor with the husker.

In our strain of Minnesota No. 13 we aim to retain the earliness of the true variety by obtaining the seed for our own planting either directly from the Minnesota Experiment Station or from one of their accredited growers each year. We thus preserve the type of the experiment station as nearly as possible, which would not be the case if we continued to raise this variety in the vicinity of Mitchell or south of here from the same stock year after year.

One field near Mitchell produced good ripe corn in 87 days from the time it was planted. It is safe to depend upon Minnesota No. 13 in 90 days any year. We have a large supply of fine quality Minnesota No. 13 which is sure to please you.



Minnesota No. 13 Corn.

Alzada, Mont.

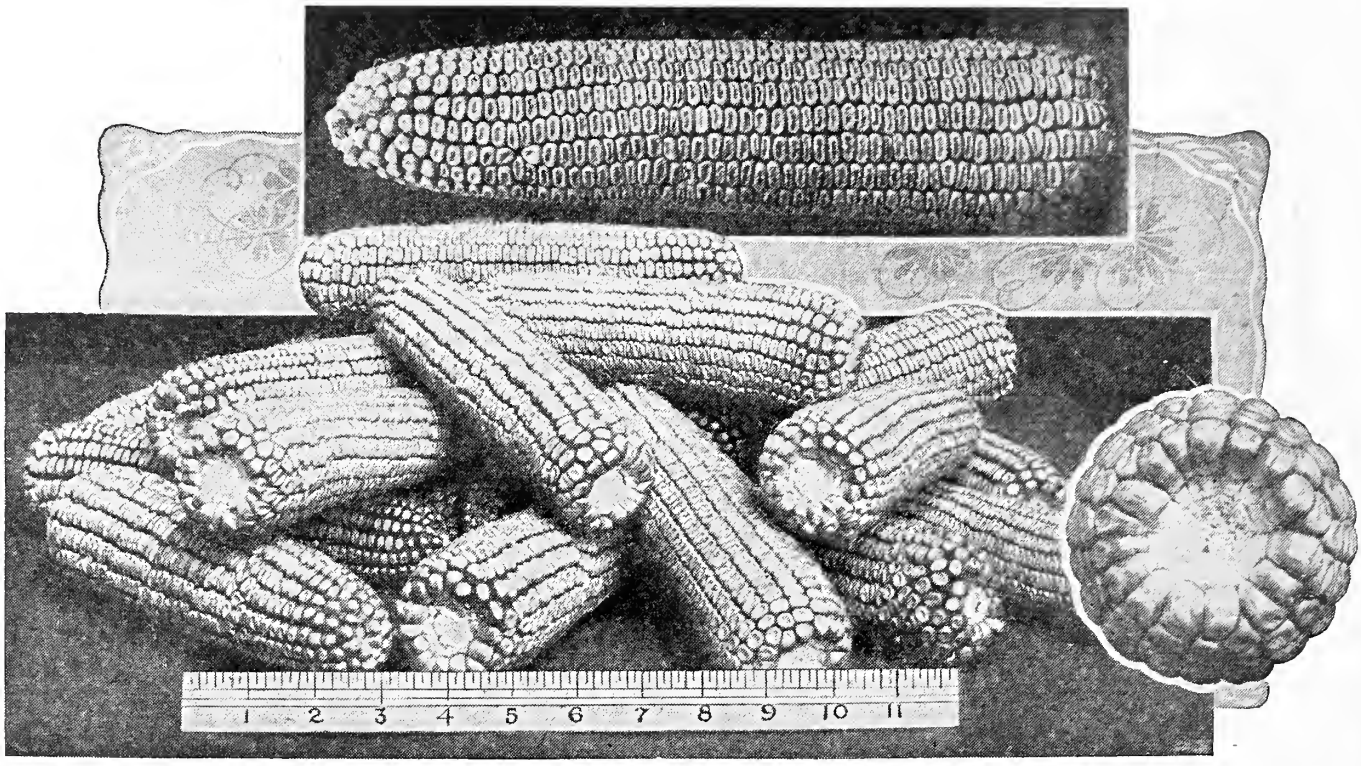
I have bought seeds from you two seasons, once while in N. Dak. All have proved to be of high germination. Your method of doing business has been satisfactory to me—filling orders as far as possible promptly and not delaying the whole order on account of being short on a few, and then forwarding shortage at the earliest possible time.

Fred J. Engel.

For Prices See Special Sheet Inside of Front Cover.

Disco-Murdock Corn

Exceptionally Good 100-Day Variety for Northwest



Disco Early Murdock.

A variety very similar to our Riverview Special in color, size of ear and general make-up. The ears are well formed, shell off a large percentage of corn, the kernel is deep and with a large germ. We recommend Early Murdock for all parts of northern Iowa, central and southern Minnesota, southern and central South Dakota, northern Illinois, southern Wisconsin and Michigan.

It is considered one of the most productive and as early as any of the deep kernel varieties. It is well established in type and is growing in favor with those who know it. It is one of the most dependable of the later varieties. The stock attains a growth of from 6 to 8 feet high. It is a stout, stiff stalk which stands well in storms. The ears are borne well up on the stalk. It almost invariably yields well and with good care and favorable conditions will give a very large crop.

Wimple's Yellow Dent

Another prize winner and a variety recognized as standard in the north half of the Corn Belt. Has been grown for a number of years in southeastern South Dakota close to the boundaries of Iowa and Minnesota. Won the northern zone sweepstakes at the National Corn Exposition in 1907 against all comers from the northern states.

The size of the ear is surprising, an average ear measuring 9 to 9½ inches in length, 6½ to 7 inches in girth and containing 16 to 18 rows weighing 9 to 12 ounces. Its season is suitable to southern Minnesota, southeastern South Dakota, most of Iowa, northern half of Illinois, southern half of Wisconsin and other localities having similar seasons.

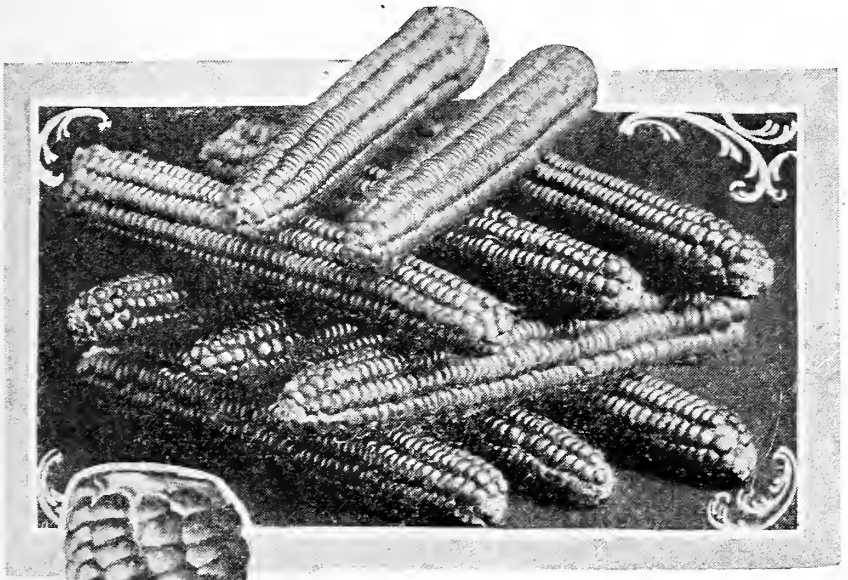
The Early Murdock is a good corn for this country. It will ripen here if it has half a chance. This has been a very poor year with us for corn, but last year I planted some June 10th. It did fine and got ripe early. J. D. Vroom, Howard, S. D.

You sent me one bushel of Early Murdock corn, it grew good and is the best crop I ever raised.

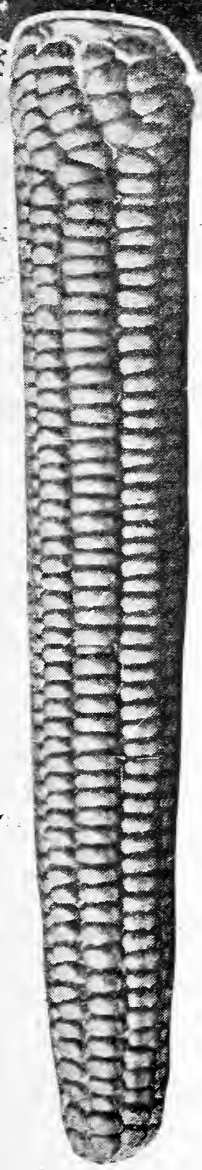
D. C. Brooks, Byron, Minn.

For Prices See Special Sheet Inside of Front Cover.

Disco Flint Corn



Disco Flint Corn.



There is always a large demand for flint corn in all the Northern states and Canada. The various types of flint corn vary somewhat in earliness and yield, but all of them seem to possess the ability to mature a good crop of corn under adverse conditions. In the Northwest flint corn is largely used as a crop for "new breaking." It is also much used for late planting, where early crops fail to grow or for any reason the crop cannot be planted until late in the season. In this latitude it can usually be depended upon to produce good corn if planted as late as the 4th of July. Flint corn is a very good type of corn to plant where the crop is to be fed in the field. It may be planted either alone or with other forage crops for this purpose.

Disco White Flint. White Flint or Flour Corn as it is sometimes called, is becoming more and more popular each year. It is pearly white in color, the ears have from 8 to 10 rows, length of ear from 8 to 12 inches; kernels broad and blocky. From one to three ears are borne to each fine leafy stalk. The stalk is from 4 to 6 feet high, depending on the season, and the ears are from 8 to 20 inches from the ground. Matures corn with a very small amount of moisture. Is well adapted to high altitudes and northern latitudes.

Gehu Flint. The earliest variety of flint corn and the earliest variety of any kind of corn. Adapted to the most northern localities. Ears small and low-down; color of kernel light yellow. The seed we are offering is grown from strictly northern grown "seed stock" from the extreme north. The quality and germination are good. If you have short seasons and can't grow other late varieties try the Gehu Flint. It will mature if any corn will.

Disco-Squaw Corn (85 days). A very early "Native" variety, having kernels all colors of the rainbow. A very beautiful corn and one that is very popular for late planting. The ears are larger than the Gehu but smaller than the **Disco** White Flint. It is corn of quite high yield and good quality. A splendid corn in every respect.

For Prices See Special Sheet Inside of Front Cover.

Corn for Fodder and Ensilage

Dry fodder corn is probably the most satisfactory substitute for hay; in feeding value it is nearly equal to timothy hay, ton for ton and will produce from three to five times as much feed per acre.

Cattle feeding and dairying is making wonderful progress in the Northwest, increasing land values and bank accounts. There are seasons, however, when pastures are parched from drought making it necessary to depend upon forage crops. To insure a uniform amount of feed, silos have been constructed, scores of them in almost every county. The fodder or ensilage crop now is found a matter of necessity.

Fodder corn drilled in rows 3½ feet apart using from ½ to 1 bushel of seed corn per acre will usually produce from 12 to 15 tons of green fodder per acre. If one desires the fodder to be of a coarser nature, 12 to 15 lbs. of corn drilled in will be sufficient. By putting in this amount, the corn will naturally produce more grain.

Disco Early Fodder. An early yellow or white dent corn producing a medium size leafy stock. Some prefer this instead of the larger varieties as it matures earlier, the stalks are finer, more easily handled with the corn harvester, cures more readily and gives well formed ears.

Disco Medium Fodder. About a 90 to 95 day corn, producing a large leafy stock from 7 to 8 feet in height. It will form a good ear thus adding to its feeding value.

EVERGREEN SWEET CORN FOR FODDER.

All varieties of Sweet Corn possess ever so much more "sugar" than feed corn. This is most important, for corn or feed containing this element in any quantity is naturally of great value. Evergreen Sweet Corn for fodder grows a leafy stock 6 to 7 feet in height and makes well formed ears, and yields a large amount of succulent fodder per acre. Drill in from 1 to 2 bushels of seed per acre in rows far enough apart to cultivate. Our stock is limited on this variety so get your order in early.

For Prices See Special Sheet Inside of Front Cover.

Forage and Soiling Crops

DAKOTA EARLY AMBER FODDER CANE.

The earliest of all canes. This new strain which is called the "Dakota" Amber Cane was selected from S. D. No. 341. In this we have the earliest and most drought resistant variety of cane on the market. It will mature and produce seed in from 80 to 90 days. It is a very leafy, desirable type for the North. The stalks grow from 5 to 6 feet in height and are very sweet. Yields of from 12 to 15 tons of green feed per acre are not uncommon. It can be sown or drilled in using from 40 to 60 pounds of seed per acre.

Southern Grown Fodder Cane.

This variety does not mature so rapidly as the Dakota Amber Cane, but the yield is very much heavier. When cane is grown for fodder alone the southern grown cane will produce a greater amount of fodder. It is sweet and palatable, and a very desirable feed for dairy cows and sheep, in fact all kinds of live stock eat it readily. It can also be sown thick and used to a good advantage for pasture for cattle, hogs or sheep. This variety is not suitable for sorghum syrup when grown in the North. Sow from 40 to 60 pounds of seed per acre.

Dakota Amber Sorghum Cane.

The earliest, richest and altogether the best sorghum cane for the North. In fact the only variety which can be absolutely depended upon for the making of sorghum or syrups.

Plant from 4 to 8 pounds per acre in rows 3½ feet apart.

Sudan Grass.

Sudan Grass belongs to the Sorghum family. It is an annual grass, meaning that it has to be reseeded each season. Very few people appreciate the value of this wonderful forage crop. Continuous experiments are leading many to believe that Sudan Grass can take the place of millets. It readily adapts itself to the soil and climatic conditions wherever sown, and under favorable conditions will yield two good crops of hay a season, varying from 1 to 6 tons per acre.

Sow Sudan Grass from one-half to one inch deep after the soil has become warm or about corn planting time. When seeded broadcast use from 10 to 15 pounds per acre. In drills 6 pounds of seed per acre is sufficient.

Dakota Early Amber Cane.

Feterita, a grain which has attracted considerable attention in Kansas, Missouri, and Oklahoma on account of its extreme drought resisting features, its heavy yields, and earliness. It belongs to the Sorghum family. Makes a medium high growth and is about equal to Kaffir corn in feeding value. Often yields from 25 to 35 bushels per acre. If sown in rows and cultivated, 3 to 8 pounds of seed per acre are required, while if sown broadcast for fodder about ½ bushel per acre is required.

Kaffir Corn. Another member of the Sorghum family. Making excellent fodder either green or dry. The stalks grow 4 to 5 feet high and are very leafy. They do not harden like other varieties of sorghum, being brittle and juicy and highly relished by all kinds of stock. Will usually yield from 35 to 50 bushels of seed per acre.

For grain sow in rows 3½ feet apart using from 4 to 8 pounds of seed per acre.

For Prices See Special Sheet Inside of Front Cover.

Field Peas

Without a question field peas are one of the best one year crop nitrogen producing plants that can be grown. For this reason they are a great soil enricher and add wonderful producing properties to the soil. This is a fact that should not be overlooked.

Grain is grown year after year on many farms sapping the productiveness and fertility out of the soil. Peas are a crop which is not only profitable as a forage crop but will enrich the soil with the much needed nitrogen and make the fields more productive.

Field peas have many uses. The vines make a rich, nutritious hay, which can be fed to milch cows and sheep with very pleasing results. They will increase the flow of the milk in the dairy herd. When threshed the peas may be ground and fed to stock.

Sowing Canada Field Peas.

This is the standard variety of field peas. The vines attain a height of from 3 to 4 feet, and if allowed to mature, the yield often varies from 30 to 40 bushels per acre.

When sown alone about 3 bushels of seed are required per acre. They can be matured and threshed when dry.

Peas and oats are often sown together using 1 to 1½ bushels of peas and 2 bushels of oats per acre. If cut green for hay this combination gives a surprising amount of feed per acre. They may also be allowed to mature and can be harvested and threshed.

Peas sown in the corn field at the time the corn is laid by provides a combination of feeds that is unexcelled for hogging down or for sheep pasture.

Method of sowing: Sow peas broadcast in proportions as described above and cover them about four inches deep.

Soy Beans. Southern Grown.

Valuable for hay crop or soiling feed for cows, hog or sheep pasture and also for green manure. They are great soil enrichers storing up nitrogen in the soil. Should be planted after corn planting in rows two to three feet apart using from one-fourth to one-half bushel per acre. If sown broadcast from 40 to 50 pounds of beans per acre.

Navy Beans. In the past two or three years there has been a great demand created for beans. They are one of the best and cheapest foods produced. Our stock is extra select, hand picked, true type, small sized navy beans. Good yielders, and being Dakota grown, are acclimated to northern territory. This variety is giving the best of satisfaction. Sow 30 to 35 pounds per acre in drills 30 inches apart.

Seed Flax. Flax is especially adapted to the soil and climatic conditions of our northern states. There is an increased demand for flax seed and with the normal yield of from 12 to 15 bushels per acre it is a very valuable crop to grow. Flax should not be sown on the same land oftener than about once in seven years. The seed should be treated before seeding, using one pint or pound of formaldehyde to 40 gallons of water.

Our seed all comes from new land, and is of very fine quality. Sow during the first half of June, using ½ bushel per acre.

Early Fortune Millet. Similar in every respect to the White Proso excepting it is red in color. Like Proso it is a good seed yielder, often producing from 40 to 50 bushels per acre. It is worth your while to try out either or both of these millets.

Japanese Millet. More commonly known as "Billion Dollar Grass." Entirely distinct from other millets. A wonderful forage producing plant, growing from 3 to 6 feet high with a very leafy stalk. It makes excellent hay, in quality is fully equal to corn fodder. Can be fed to all kinds of live stock. The seed head is solid and produces often times from 40 to 60 bushels per acre. However this millet is generally grown for hay. Sow broadcast 15 to 18 pounds per acre or drill in rows 12 to 20 inches apart using 10 to 12 pounds an acre.

For Prices See Special Sheet Inside of Front Cover.

Millets

Golden Millet (formerly known as German Millet), is the most popular millet on the market. In the North millet is grown almost altogether for hay, and for that reason the southern grown Golden Millet is the best. It makes a taller more leafy growth which means more hay. It makes a very palatable hay and when fed to dairy cows it produces a large flow of milk. If cut when in full bloom it makes a very tender, sweet, and excellent quality of hay. A bushel of this seed weighs 50 pounds and a bushel will sow two to three acres.

Common or Northern Millet.

After the Golden Millet has been grown in the North for two or three years it becomes what is known commercially as Common Millet. It still retains many of the traits of the Golden Millet but it loses a part of its rank, leafy growth. It does not yield as much hay nor is the hay of as good a quality as that coming from southern seed. The common millet usually grows from two to three feet high while the Golden will grow from 3 to 5 feet high. We have a very choice stock of common millet seed on hand.

Dakota Kursk Millet. This variety of millet has been on the market now twenty years. It was imported into this country from Kursk, Russia, and has proven itself to be a wonderful producer of a fine quality of hay and seed as well as a very drought resistant plant. This variety is especially recommended for the dry sections of the country. Our stock is from the Special Select Dakota Kursk seed.

Siberian Millet. This is the same type of millet as the Kursk, producing a large, leafy growth, making an abundance of hay. We have some extra choice Western grown seed.

White Proso Millet. Proso is a grain millet and is found in many colors and varieties in the dry regions of Asia. The grain ripens in 60 days. It may be cut for hay also, but the grain crop is the main item. In its original home Proso is used for human consumption, as breakfast foods and flour. Experiments conducted at the South Dakota Experiment Station at Brookings, So. Dakota, have proven that it is a good substitute for wheat. It is also a very desirable millet for poultry feed or may be ground with other grains and fed with wonderful results to hogs.

The seed is about 2½ times as large as the common or Golden millet and has an oily appearance. The leafy stock grows about waist high and the head is of a sprangly nature. Test weight of seed 50 pounds per bushel. One bushel for three acres is sufficient where the seed is sown for hay crop, while if sown for seed crop 10 pounds per acre is enough. It can be sown late on account of the short period required to mature. Try some of this wonderful crop this year. Our seed is from the original White Proso stock.

For Prices See Special Sheet Inside of Front Cover.

Disco Clovers

As with the **Disco** Brand alfalfa, seed corn and other **Disco** seeds, the same high standard of purity and germination is maintained with our clovers and timothy. This means a great deal more to you than what is signified by these words. Why take the chances of sowing seed of unknown or doubtful purity and germination when you can buy the dependable **Disco** brand seeds?

All the **Disco** clover and timothy seed must pass the pure seed laws of every state. All lots of seed are tested in the U. S. Seed Testing Laboratory. The results of these tests are given to you on the shipping tags put on your order. Does such information mean anything to you? To confirm these tests on the **Disco** guaranteed seeds, we are always glad to have you send samples of the seed to your State Agricultural College to be tested out. If figures compare favorably our guarantee is fulfilled.

Medium Red Clover. During the past two seasons red clover has met with serious difficulties. Great acreages have been winter-killed, especially in the seed producing sections of South Dakota, Minnesota and Iowa. Owing to this fact the supply of seed is very limited. Quality is a little below the standard and prices high. Heretofore our red clover has been all Dakota grown but this year have had to go to other sections for our supply.

Medium red clover is regarded as the most valuable of the Clover family. It is a dependable, all around variety for farmers and stock men. Clover is a nitrogen gathering plant which enriches or increases the fertility of the land on which it is grown. Clover should be rotated with grain crops every 3 to 5 years.

Clover may be seeded either in the spring or fall, with or without a nurse crop. Sow 8 to 10 lbs. of seed per acre. Our supply of seed is limited this year. Get your order in early.

Mammoth Red Clover is a much coarser variety than medium red. It does well for hay if cut early but is principally used as a pasture clover and a fertilizer. It is especially desirable to sow two or three pounds of Mammoth Red Clover seed per acre with the small grain in the spring. Its rapid growth after harvest insures a good pasture and when the crop is plowed under it makes the best of green manure.

Alsike or Swedish Clover produces the finest quality of clover hay. It is the hardiest of all clovers, and is well adapted as a pasture clover. Alsike thrives best on low or moist lands. It is an ideal clover to mix with timothy, as it cures as readily as the timothy. Its yields of hay are well in its favor. Sow 6 to 8 pounds per acre.

White or Dutch Clover. Is a low, close growing clover usually not attaining a height of more than 4 to 6 inches. The leaves are small and the flower round, white with a pinkish tint in color, and very fragrant. This variety is especially adapted to lawn and pasture purposes as it will stand very close cropping without injury. Does well on most any soil. It is usually best to sow with other grasses, using from 2 to 6 lbs. of seed per acre.

I think your method of doing business should appeal strongly to every one interested in the growing of seeds. In short your methods are honest, and your seeds are honest and I don't know what else a man could want.

John R. Kirk, Springfield, S. D.

Was particularly pleased with the seeds I bought from you. They were as you represented and were exactly like the samples you sent before I ordered.

J. J. Walsh, Armour, S. D.

Hawarden, Iowa.

Dear Sirs: I have just received your catalogue and as I tried you last year and was well satisfied,, am sending you at this time my order. I can get cheaper seed than you offer, but I got fine unmixed seed last year and I believe you will send as good as money will buy, as well as true to name. Thanking you for past favors, yours for luck,

Hiram Rich.

For Prices See Special Sheet Inside of Front Cover.

Disco Grass Seeds

Timothy. The best and most widely known of all grasses, and the leading grass in many sections for meadow and pasture. It is extremely hardy; very seldom winter kills and stands heat and drought equally as well. Timothy is adapted to many soils but seems to do best on a clay loam. Will stand considerable moisture without damage. There are several items in its favor. It is easy to establish, making a very quick, rapid growth. The seed is inexpensive as compared with many other grasses. It yields from one to two tons of hay per acre. The hay grows about waist high with a slender stem and reasonable amount of leaves, which cure readily, when cut.

Many experiments have shown that timothy rapidly exhausts the nitrogen in the soil. This condition may be improved upon by occasionally manuring the field or by the use of other fertilizers. The most natural way to keep up the fertility of the soil is to sow timothy and clover mixed. This makes an excellent combination, and produces better quality of hay. To get the highest feeding value out of timothy, the hay should be cut when in full bloom or soon after.

The **Disco** timothy seed is all Dakota grown. It has been thoroughly recleaned, is of excellent color and high purity and germination. Sow 10 to 12 pounds of seed per acre.

Timothy and Alsike Mixed make one of the most desirable combinations of seed for meadow purpose. They are both very hardy plants and the hay from this combination is richer in feeding values than timothy alone.

The seed we are offering is about one-third alsike and two-thirds timothy. This makes a good rich combination. Sow 12 to 15 pounds of this mixture per acre.

Timothy and Medium Red Clover mixture of the same proportion may be had at a little higher figure.

Red Top Solid Seed, commonly known as Herd's Grass, has thick roots and makes a very firm sod which makes it very desirable for pasture purposes. Red Top will grow where the soil is too poor for timothy and other grasses. Especially desirable to sow on rather moist soil. It is a good grass to sow with timothy and clover for both meadow and pasture and is more hardy than either of the two. Red Top grows from 1 to 2 feet high, with a good thick undergrowth. Yields from 1 to 2 tons of excellent hay per acre. For the best quality of hay it should be cut when in full flower. Sow from 10 to 12 pounds of solid seed per acre.

Permanent Pasture and Meadow Mixtures. In these mixtures we are able to supply you with grasses and clovers which are especially adapted to a large variety of soils. In placing your order if you will state whether you want it for either "high dry land" or "low wet or moist land" we will supply you with seed that will meet your requirements. These mixtures contain Red Top, Kentucky Blue Grass, Meadow Fescue, Perennial Rye Grass, Timothy, Alsike, Medium Red Clover, Alfalfa and White Clover. Sow from 20 to 30 pounds per acre.

I am very well satisfied with your manner of doing business and shall send a larger order next spring.

Carl Hunter, Fairview, Mont.

All the seeds that I have received from you were O. K. I like your manner of doing business.

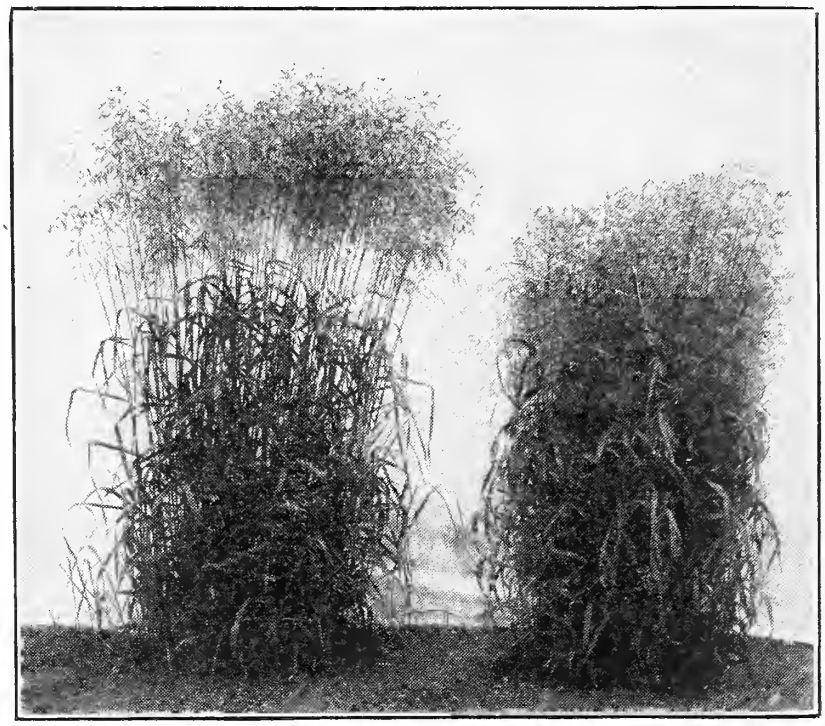
William Jane, Blunt, S. D.

I think your seeds are the best I ever had from any seedsman. I have bought from the East for twenty years or more. I like your painstaking way in doing business. Your testing and guarantee helps a gardener in many ways.

J. C. Innes, Luverne, Minn.

For Prices See Special Sheet Inside of Front Cover.

Grasses



Russian Brome Grass (Bromus intermis), showing two types of plants.

Kentucky Blue Grass is sometimes called "June Grass." It makes a very good pasture grass for all kinds of live stock. The sod is thick. The plant is very hardy and stands the cold and dry weather remarkably well. Blue Grass is one of the first grasses to be green in the spring. It is not advisable to pasture Blue Grass until the sod is well estabished.

Blue Grass is also a very popular grass for lawn purpose, mixing white Dutch clover makes a beautiful velvety lawn.

For pasture sow from 30 to 40 pounds per acre while for lawn 70 to 80 pounds of seed per acre should be used.

Meadow Fescue or English Blue Grass does well on poor soil and makes a wonderful growth on good land. The roots penetrate deep and the plant stands drought to a marked degree. Especially desirable for pasture and is also fine for hay. It grows from two to three feet high. The hay is very nutritious and cattle thrive well on it. Sow from 25 to 30 pounds of seed per acre.

Perennial Rye Grass. Becoming one of the well known pasture grasses. Stands close cropping. Does well on land suitable for corn production. Producing an abundance of forage. The hay is relished by all kinds of stock. Sow 15 pounds per acre.

Crested Dogstail. A hardy grass making a smooth, compact and lasting turf. Roots deeply and withstands dry weather. Does best on rich, moist land but will grow on most any soil. Sow 30 pounds seed per acre.

Disco Lawn Grass. A combination of the best grasses which are especially adapted to make a firm and lasting turf. One pound will seed 350 square feet, 5 pounds for 1,750 square feet, 10 pounds for 3,500 square feet, 100 pounds per acre.

Bromus Inermis. A native of Russia. A grass that is well adapted to a cold climate. One of the deepest rooting grasses on the market. Suited to a dry soil. Makes the best of pasture getting green the first thing in the spring and late in the fall.

Brome Grass thickens up rapidly, making a dense growth of leaves which start close to the ground. Produces an abundance of hay which is relished by all kinds of live stock.

It is extremely hardy and is very seldom winter killed. It can stand an abundance of water. Well adapted to a large variety of soils. Especially recommended for the Dakotas and Minnesota. Sow from 20 to 25 pounds per acre.

For Prices See Special Sheet Inside of Front Cover.

Disco Select Northern Grown Small Grains

There are many varieties of oats offered on the market. Tests of many of these varieties have been made on the Riverview Ranch. From these there are the three following varieties which have proven themselves to be worth while for this northern latitude.

Swedish Select. This variety has become well known throughout the country, and especially in South Dakota, Minnesota and Wisconsin; also Montana. The experiment stations of Wisconsin and South Dakota have been foremost in introducing this variety. Today it is standard and found to be wonderfully drought resistant. In the region between the James and Missouri rivers, a dry period often comes in the early part of the growing season. At this time many varieties of oats are seriously injured by drought. The Swedish Select, however, has shown itself capable of resisting dry weather at this season of the year and in fact has produced some of its largest yields in such seasons.

Its habits of growth are so vigorous that on heavy soils it is likely to lodge, but on light soils it has no superior. Sow 2 to 2½ bushels per acre.

Swedish Postia Oats. Every year the Swedish government is experimenting with various varieties of small grain. At last they have found something, the Postia Oats, that outrival the Swedish Select. The Postia has only been grown in this country four years. Its first American home was in Wisconsin. Then the seed was brought to Mitchell, where it has been grown for the past two seasons with marked success.

This variety was bred up from the large white oats. The grain is good sized, white in color, plump and heavy, very strong straw, and a heavy producer. Particularly adapted to thin, light soils.

Our seed is exceptionally fine quality, having been thoroughly recleaned. You cannot buy better stock at any price. Get started on these new oats this year. Sample on request. See special price list.

Sixty-Day. A very early yellow variety much resembling the Kherson in every particular, but much hardier and ripens about same time as barley. Was imported from Siberia several years ago, making a splendid addition to the small grain varieties. We can recommend the Sixty-Day as being a good yielder, stand up with stiff straw and not subject to rust.

Barley is the most certain crop regardless of the season. Is very drought resistant, yielding splendid returns in dry farming areas. Seldom lodges even in rich moist places owing to a stiff straw, which is also rust resistant. Yields vary but are usually well worth while. In comparative feed values, tests have been made which show that 500 pounds of ground or soaked barley is equal to 400 pounds of shelled corn.

Manshury Barley. The best variety and probably better known than any other variety offered to the farmers of the United States. It produces a good plump grain high in protein. The straw is strong and stiff, and seldom lodges. The heads are long and well filled, and carry 6 rows of good plump grain. You will do well to sow a few acres of Manshury.

For Prices See Special Sheet Inside of Front Cover.

Spring Wheat

Sow about 1¼ bushels per acre.

Marquis Wheat. A heavy yielding beardless variety absolutely without a peer. It originated in Canada by crossing Red Fife, with Hard Calcutta wheat. The Calcutta was a native of India which became acclimated to northern conditions. Marquis is an early spring wheat, very hardy, withstands very dry weather at growing season as well as severe weather at planting time.

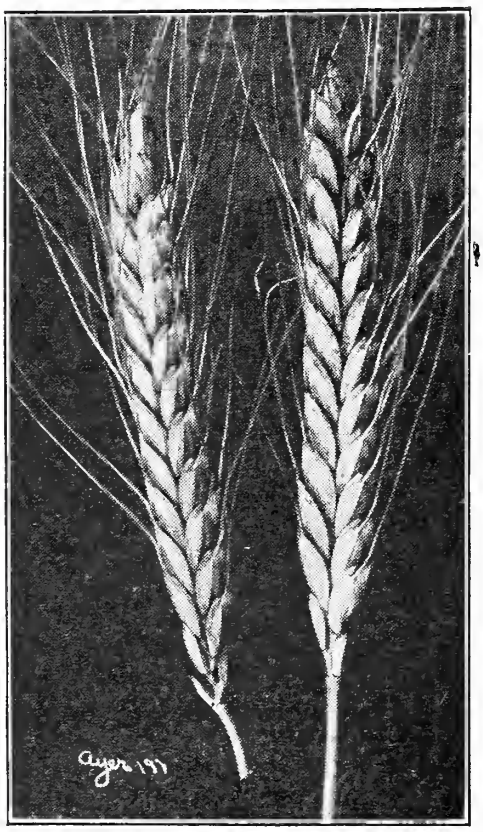
Marquis wheat is from one week to ten days earlier than any other variety of spring wheat. It will out yield other varieties of spring wheat from 5 to 10 bushels per acre under same conditions. The straw is medium height, stiff and strong. Maturing early enough so the rust, smut, drought and hot winds do not have so much of an effect on it. The kernel is short, thick, plump and flinty, and rather a dark amber color. One of its main features is that it is beardless, and does not shatter easily. In changing your seed this season, consider the Marquis with increased yield and earliness in its favor.

Kubanka Wheat. It is bearded wheat of a Durum of Macaroni variety. It has been grown on the **Disco** farm for the past three years with wonderful success. Have found it to be a great drouth and rust resistant. All the agricultural experimental stations reports place this variety at the head, or nearly so, of the list, both in yield and hardiness. Yielding better than other varieties of Durum.

Try a few acres of this Kubanka wheat and increase your profits.

Turkey Red Winter Wheat. A standard red bearded winter wheat with a stiff straw. Ripens early, and a big yielder. The kernels are red, hard and flinty. The best winter wheat on the market.

Speltz or Emmer



Speltz or Emmer.

The value of this wonderful grain crop is not fully appreciated. It has been grown in the United States for a number of seasons, and is rapidly increasing. It is found to be adapted to a large variety of soils and climate. Especially desirable for the Northwest Great Plains region. It is very drought resistant and a good yielder, often yielding from 35 to 50 bushels per acre.

During the past season trials and tests have been made to work this grain into a flour substitute. The results have been very pleasing. It mixes well and makes a good dough without the adding of wheat flour. Makes good white bread and excellent pastry flour. Speltz will find more of a ready market for this purpose in the future.

It is readily eaten by all kinds of live stock, and shows itself especially adapted for the feeding of milch cows and hogs. It makes a very heavy feed when fed alone and on that account it is advisable to mix bran or shorts with it.

Give Speltz a place on your farm. Two bushels (84 lbs.) required to sow an acre.

For Prices See Special Sheet Inside of Front Cover.

Rye

Sow 1¼ bushels seed per acre.

Winter Rye.

SPRING RYE. Genuine Pure Spring Rye, Sown in the Spring and Harvested the same Season. Spring Rye makes an excellent crop. It does not grow quite so large a straw as the Winter Rye. The quality of the grain is excellent and the yield is usually from 25 to 35 bushel per acre. Spring Rye is sown in the spring the same time as other Spring grain crops. We have a large true stock of Spring Rye of excellent quality. Take advantage of this opportunity to get the genuine Spring Rye.

Amber Winter Rye, is a much hardier winter grain than Winter wheat and can be grown on a larger variety of soils. Very drought resistant and does well on light sandy soil. Rye is put to many uses, as for grain, fodder, soiling purposes and green manure. Makes excellent pasture for pigs, calves, and other stock. Rape may be sown with it in the spring to increase the length and value of the spring pasture.

Amber Winter Rye should be seeded between Aug. 15th and Sept. 15th. If drilled about 2½ inches deep there will be less danger of winter killing.

Disco Improved White Hulless Barley.

No beards, no hulls, the straw is stiff and straight, growing about waist high, and seldom lodges. This is not a malting barley but for feed there is no barley its equal. The grain has the appearance of wheat and weighs from 58 to 63 lbs. per bushel. It will mature in from 70 to 90 days according to soil and conditions. It makes a very strong horse feed 2 quarts equaling about 4 quarts of oats. Makes excellent feed for hogs, horses, and poultry. Yields of from 30 to 60 bushels per acre are not uncommon.

It may be grown for hay and produces a good rich feed when cut just before it is ripe. Sow about 1½ bushels per acre.

For Prices See Special Sheet Inside of Front Cover.

Rape

Rape, can be put to quite a number of uses. It may be sown alone as a spring crop to provide early pasture. It may be sown with spring grain to provide fall pasture after the grain is cut. In this latter case it is better sown after the grain is up and the ground dragged immediately after sowing to cover the seed. As it is a common practice to drag or weed our grain crops after they are up, the sowing of rape at this time can be easily done. Rape may also be sown just before the last cultivation of corn to provide fall feed and increase the yield of feed per acre, or rape may be sown with fall rye to provide fall pasture.

The uses of rape are hardly limited to those mentioned above, as it may be sown at almost any time of the year and will provide quickly a large amount of forage. The farmers of the Northwest have not yet come to realize the possibilities of rape. There are thousands of acres of land sown to small grains that could be made to yield an abundant fall pasture by the sowing of two pounds of rape seed to every acre of ground. The cost of the seed is so little and so small an amount is required that there is really no expense connected with it compared to the value of feed that is secured. The amount of seed that is sown per acre varies from two to six pounds, depending upon the way it is handled. When sown alone, from five to six pounds are recommended. When sown with small grain, two to three pounds.

Rape sown in Corn at Last Cultivation.

Rape sown with Small Grain for Fall Pasture.

Buckwheat

Japanese Buckwheat. The seed is a rich dark brown in color and much larger than the Silver Hull. Buckwheat remains in bloom for some time after the first seed is ripe. It is especially desirable for bee pasture. When plowed under makes excellent green manure. Sow as late as possible and still have crop well developed before severe frost occurs. Light, well drained soils are best for this crop. Sow about 50 lbs. seed per acre.

Silver Hull Buckwheat, is earlier, remains in bloom longer than other varieties. A fine variety for honey bees. The grain is light gray in color and has a thin hull. Silver Hull is much preferred by the millers as it makes a richer whiter flour. Under favorable conditions will yield from 40 to 50 bushels per acre.

For Prices See Special Sheet Inside of Front Cover.

Please Read Before Ordering

When orders are received from this Catalog the Dakota Improved Seed Company assumes that the customer has read this page before placing his order.

Write plainly your name, postoffice, county and state on each and every order sent us. If shipment is to be by freight, be sure to state whether the railway station is the same as your postoffice or not.

Order early. A great many delays and other troubles can be avoided by ordering early and we will consider it an accommodation if you will do this.

Cash should accompany order, and should be in the form of money order, bank draft or as currency in a registered letter.

Delays in shipment. If we cannot send your order the same day that it is received we will mail you a card stating that we have received your order and we state the amount of money inclosed and the number of the order. If this notice or the seeds themselves do not reach you in reasonable season write us without delay, so that we can look the matter up. If your order can be filled within a few days this is all the notice we give. If for some reason shipment on a part or all of your order is unavoidably delayed, we will give you notice. It some times happens that we are out of stock or our stock may not be cleaned ready for shipment, or there may be other reasons. Write to us if your order does not arrive in due season.

Prices in this book are subject to change without notice. The prices quoted are based on the conditions prevailing at the time this book goes to press. If you desire to place an order for items on which the prices are likely to fluctuate or for large amounts of any seeds, it is better to write for firm prices before ordering, same to be good for immediate acceptance. Prompt attention will be given requests for quotations.

I like your method of doing business and I believe that it will prove a winner with the farmers throughout the country.

C. H. Lugg, Parkston, S. D.

Your seeds are first class. I have found your way of doing business fair, straight and honest.

I. G. Fjerstad, Bryant, S. D.

We will consider it a Special Favor if you write below the Names of some of your Friends who are likely to use Field Seeds

NAMES	POSTOFFICE	STATE

Disco GUARANTEED SEEDS Order Sheet

Date.....191...

Dakota Improved Seed Co., Mitchell, South Dakota.

Gentlemen: Please send the following seeds,

by .....

State here if wanted by freight, express or parcel-post.

Name .....

Post Office .....

County ..... State.....

R. D., P. O. Box or St. No.....

Nearest Railway Station.....

State here name of town to which goods are to be sent if different from P. O.

Is there a freight agent at your railroad station?.....

If there is no freight agent at your shipping point, money must be sent with order to prepay the freight charges.

This order is placed subject to the guarantee and conditions of sale given in the **Disco** Seed Book.

State Amount Enclosed		
Currency	.....	.....
Draft	.....	.....
Money Order	.....	.....
Total	.....	.....

Please Do Not Use This Space

Order Received

Order No.

Freight.....	Charges.....
Express.....	Collect.....
Parcel Post..	Prepaid.....

Filled by	Date	Checked by	How Shipped

Cut Off on This Line

QUANTITY	SEEDS OR OTHER ARTICLES WANTED	Amount	

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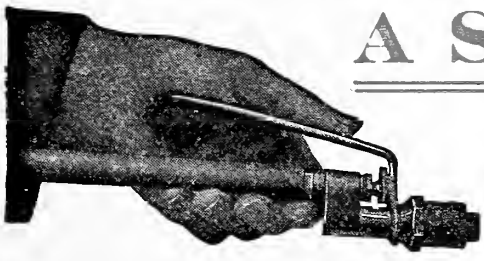
DAKOTA IMPROVED SEED CO.

Mitchell, So. Dak.



A Special Offer for You

To introduce the new "KANT-KLOG" Sprayer we make a very special offer to the first reliable applicant in each locality. The "KANT-KLOG" has distinct features found on no other sprayer. It is the first and only nozzle to give both flat and round sprays and solid streams. Has cleaning device for removing obstructions without stopping the spray. The new spring Hose-Cock starts or stops the spray instantly so preventing waste of fluid.

Sprays Trees, Potatoes, Vegetables, Vines, White-Washing, Disinfecting and many other uses.

Others are making hundreds of Dollars with this Machine

If you wish either to book the orders in your section, or want a sprayer for your own work, fill out the blank on opposite side and we will send special proposition, descriptive matter, etc.

Return this to

ROCHESTER SPRAY PUMP CO.

177 Broadway, ROCHESTER, N. Y.

(See other side)

FIFTY ACRES **in a ten-hour day—seeded evenly, thoroughly and easily.** That's what **you** can do with a Cyclone Seeder. Use it with any seeds that can be sown broadcast or with ground bone, ashes or fertilizers—**a Cyclone will pay for itself in three hours work!** Because its absolutely even distribution will make **three** bushels do the work **of four.**

The Parts that do the Business

1. **SLOPE FEED BOARD**—A very important feature, **found only in the Cyclone.** Keeps the hopper properly filled without tilting the machine. Insures a uniform flow and affords a great convenience to the operator in carrying the Seeder.

2. **AUTOMATIC FEED ADJUSTMENT**—Gives positive Force Feed throughout. Quickly adjusted for different seeds. Flow can be started or stopped instantly by a touch of a lever. Can't clog or "rush." No waste of seed.

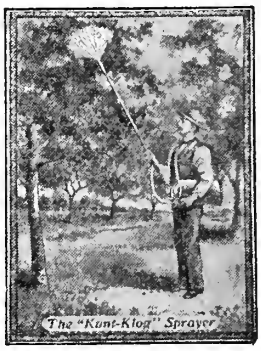
3. **DISTRIBUTING WHEEL**—Scatters seed evenly. Throws equal amounts to equal distances on each side of operator. Made of solid tin—with no soldered joints.

Low Priced—But Guaranteed Absolutely.

$1700 Made by One Man

Selling the "Kant-Klog" Sprayer in his home County during spare time

If you need a sprayer for your own use—or if you want to book the orders of your neighbors and friends, fill in and send this blank to address given below—we have



A Special Offer for You

Name_____

P. O. _____

St._____ State_____

Mail this to ROCHESTER SPRAY PUMP CO.
177 BROADWAY, ROCHESTER, N. Y. (Over)

GUARANTEE

The Dakota Improved Seed Company Guarantees the Seeds It Sells to Be as Represented as to Quality and Germination. The Company Will Replace Any Seeds or Refund the Money on Any Seeds Sold by It That Prove to Be Otherwise

It shall be the duty of the purchaser of goods sold by the Company in order to claim the benefits of its guarantee:

1. To inspect shipment carefully on arrival and report anything that appears wrong.
2. To take samples of all important bulk seeds in shipment.
3. Upon receipt of seed to test portion of sample for germination or send sample to U. S. Seed Laboratory, or to your State Experiment Station.
4. If results of these tests are not as represented or are not satisfactory, to report this to the Company at once and adjustment will be made accordingly.
5. To make complaints, if any, as soon as the fact on which complaint is made can be determined. Complaint on the germination of seed corn must be made within two weeks after shipment is received. Field results as to germination and purity may be referred to in making complaint, but must not be depended upon as basis for settlement because field conditions are beyond the Company's control.

The Company will not insure a crop from seeds purchased as to description and productiveness because of the many factors which influence a crop and which are entirely beyond its control.

In no case will the liability of the Dakota Improved Seed Co. exceed the price paid for the seed purchased of the Company.

FREIGHT RATES FROM MITCHELL, SO. DAK.

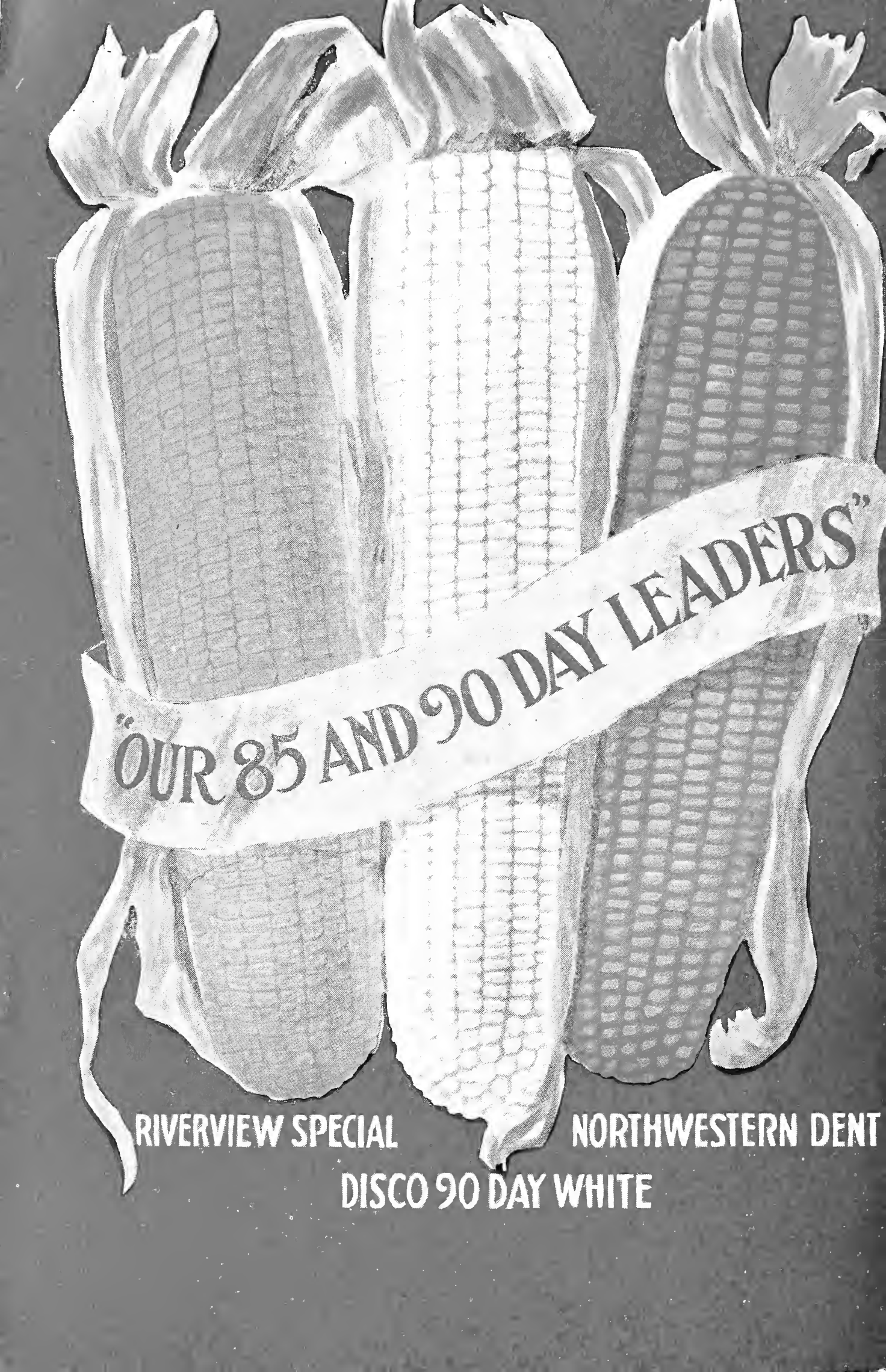
In Effect January 1st, 1919.

These rates are not guaranteed, but are made up from the tariffs now on file, and subject to change without notice.

Rates Given in Cents per 100 Pounds, Less than Car Lots.

Alfalfa, Clovers, Grass Seeds, and Cane Seed take third class; Grain, Corn and Feeds take fourth class as per Western classification.

	3d	4th
Aberdeen, S. D.	.35	.26½
Armour, "	.23½	.18
Andover, "	.40½	.30
Belle Fourche, "	1.17½	.91½
Buffalo Gap, "	1.20	.99
Bowdle, "	.45	.33
Belvidere, "	.71½	.61½
Bridgewater, "	.18½	.14
Bradley, "	.43	.32
Chamberlain, "	.26	.19½
Canton, "	.26½	.20½
DeSmet, "	.30½	.23
Dallas, "	.96½	.78
Elk Point, "	.33	.25½
Flandreau, "	.33	.25½
Faulkton, "	.48½	.36
Gettysburg, "	.48½	.36
Howard, "	.26	.19½
Huron, "	.30½	.23
Kennebec, "	.40	.32½
Lemmon, "	.81½	.63
McLaughlin, "	.67½	.56½
Murdo, "	.61½	.52½
Miller, "	.37	.28
Milbank, "	.50½	.37½
Orient, "	.48½	.36
Plankington, "	.17½	.13
Platte, "	.35	.26½
Pierre, "	.48½	.36
Phillip, "	.93	.74
Rapid City, "	.91½	.80
Redfield, "	.28	.22
Sioux Falls, "	.26½	.20½
Salem, S.D.	.20½	.15
Tripp, "	.20½	.15
Tyndall, "	.25½	.19
Underwood, "	1.12½	.91½
Woonsocket, "	.18½	.14
Wolsey, "	.23½	.18
Watertown, "	.43	.32
Mobridge, "	.50½	.37½
Yankton, "	.28	.21
Edgeley, N. D.	.59	.45
Fargo, "	.85	.65
Grand Forks, "	1.04	.80
Hettinger, "	.90	.68
Jamestown, "	.84	.65
Linton, "	.66½	.51½
Oakes, "	.84	.65
Minot, "	1.22½	.94
Wahpeton, "	.76½	.59
Crookston, Minn.	1.02½	.81½
Duluth, "	.80	.56½
Fergus Falls, "	.92½	.72½
St. Cloud, "	.69	.52½
Marshall, "	.54	.37
Worthington, "	.37½	.28
Winona, "	.54	.46½
Minneapolis, "	.54	.46½
Fremont, Neb.	.66	.49½
Lincoln, "	.75	.56
O'Neil, "	.73½	.55
Omaha, "	.57½	.43
Miles City, Mont.	1.30	.99
Mussellshell, "	1.60	1.31½
Butte, "	1.97½	1.69
Billings, "	2.05½	1.67
Lewiston, "	1.84	1.57½
Terry, "	1.21½	.90
Charles City, Ia.	.71½	.56
Cedar Rapids, "	.71½	.56½
Des Moines, "	.66	.51
Eagle Grove, "	.65	.59
Le Mars, "	.37½	.28
Manilla, "	.64	.49
Rock Valley, "	.34	.26½
Sanborn, "	.44	.34
Sioux City, "	.37½	.28
Chicago, Ill.	.80	.56½
St. Louis, Mo.	.85	.62
Buffalo, N. Y.	1.58	1.16½
Dallas, Tex.	1.99	1.78
Denver, Col.	1.50	1.18
Leavenworth, Kan.	.80	.59
Milwaukee, Wis.	.80	.56½
La Crosse, "	.54	.46½
San Francisco, Cal.	3.12½	2.50
Seattle, Wash.	2.75	2.29
Ogden, Utah	2.45	2.00½
New York City, N. Y.	1.45½	.92½
Casper, Wyo.	1.96	1.65½
Baltimore, Md.	1.42	1.00
Boston, Mass.	1.45½	.92½
Portland, Ore.	2.75	2.29
Dayton, Ohio	1.12	.82
Pittsburg, Pa.	1.58	1.16½


"OUR 85 AND 90 DAY LEADERS"
RIVERVIEW SPECIAL
NORTHWESTERN DENT
DISCO 90 DAY WHITE