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GRAIN BULLETIN

PEDIGREED SEED

Fall 1922

COKER'S PEDIGREED SEED

BLOOD WILL TELL

REGISTERED

Pedigreed Fulgurite Oats Natural Size

Pedigreed Appalachian Rye Natural Size

BUSINESS REASON FOR BETTER SEED

"As ye sow, so shall ye reap." No other fact is more certain; no other reasoning more simple. Thus in one short sentence can the reason for the best seed be explained.

Man cannot control all the factors of crop production and failure due to weather conditions may come despite his best efforts. Nothing is more certain, however, than that success in Southern agriculture under present conditions is impossible without strictest attention to quality and pedigree in seed and the selection of varieties of the highest money value which are best suited to local conditions. These must be combined with the use of the most intelligent methods of culture and control of insects and diseases.

To begin with crop success is impossible without good stands so it is absolutely necessary to use only seed of tested germination. Then the quality and yield of the crop determine the money out turn, so be certain to plant only seed which have demonstrated the greatest ability to produce dollars.

High yield and premium prices cannot be expected unless seed of pure pedigree, tested yielding ability and high germination are used. A supply of such seed can be constantly maintained on every farm by a simple and inexpensive method. You can buy each year sufficient of the most valuable pedigreed strains of the most scientific and conscientious plant breeder to plant an acreage which will produce the seed required for the whole farm next year. Special attention of course must be given to harvesting, storage and handling of this small seed area so that mixing will be avoided and high germination insured. If this method is regularly employed, Southern farmers can get the full benefit of our scientific seed breeding organization and reap a large annual profit at a cost so small that it is hardly worth considering, even though the initial price per bushel paid for the seed may seem high. Few realize the time, effort, money and scientific knowledge required in breeding new and better strains of seed. A single pedigreed animal capable of producing only a few individuals each year has frequently been known to sell at from $5,000 to $20,000. A single bushel of a new strain of highly pedigreed seed of demonstrated money yielding capacity can be bought for a few dollars and that bushel of seed has 100,000 to 1,000,000 individual seeds, each capable of producing a plant. If increased but tenfold per year, one bushel of cotton seed will plant almost the entire cotton acreage of the South in 6 years.

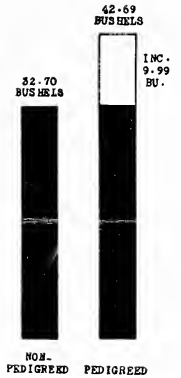
Pedigreed Seed Company

DAVID R. COKER, President

Hartsville, S. C.

Coker's Pedigreed Abruzzi Rye

The South's Wonderful Winter Crop for Grain Yield, Cover Crop and Grazing Purposes.



Where Abruzzi Rye Should Be Grown—Abruzzi is, we believe, the best variety of rye for growth in the cotton states. It is adapted to a wide range of conditions, and can be counted on to give satisfactory results.

History—This superior Rye was introduced from Italy by the United States Department of Agriculture, and distributed about 1906. The Government tests showed this to be a good variety, but for some reason it seems to have been lost or at least failed to attract attention until our improved and pedigreed strains were introduced. The Pedigreed Seed Company began the breeding of this rye in 1909, and following this for several years sold seed improved by mass selection. Our first pedigreed strain was sold in the fall of 1913. From that time its popularity has increased rapidly, and it is now generally considered to be the best variety of Rye grown in the South.

So far as we have been able to learn, most of the seed of this variety now grown in the South is descended from the strain first introduced by us in 1913. Since that time we have regularly continued our pedigreed breeding and have since sent out several new and more highly improved strains.

Seeding—For cover crop or grazing purposes, Abruzzi Rye should be sown from September 15 to October 15, for best results. Plant in cotton fields after second picking. For cover crop, sow one bushel to the acre, and for grazing two bushels per acre.

For grain or seed production, sow seed with a grain drill in November. On good soils, one-half bushel per acre is sufficient; on light soils, three pecks will give better results. This seeding requires good RE-CLEANED AND GRADED SEED. If ordinary thresher seed is used, allow one-third more seed.

The Abruzzi is considerably earlier than our native Ryes, and if planted earlier than recommended it will head out too early in the spring, and may be injured by cold weather.

While many planters seed with this rye at various times throughout the winter, they are taking a risk in so doing; and while they may get satisfactory results, late winter seedings cannot be recommended.

Our Pedigreed Seed—A Strain of Abruzzi Rye More Productive Than the Parent Pedigreed Strain

This is a strain of Abruzzi Rye more productive than the original Coker's Pedigreed Abruzzi. An accurate four-year test shows an increased yield of this strain of rye over the finest stock of the earlier Coker's Pedigreed Abruzzi of 3.3 bushels per acre.

Careful Breeding Produces Results—Our original breeding work with Abruzzi Rye by the plant-to-row Pedigree method gave an increased yield over the original Government strain of this rye, of twenty-five per cent., and our latest breeding work has now resulted in an additional increase of nearly ten per cent. over our own earlier pedigreed strain.

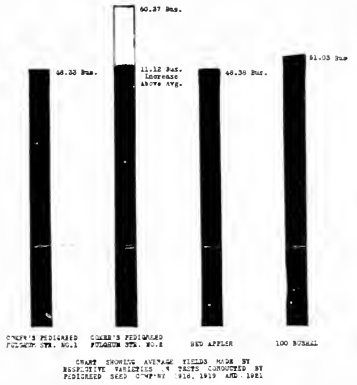
The superiority of this strain is marked. In comparison with the finest Abruzzi Rye distributed by us previously, it makes a heavier yield of a better quality product. This new strain Abruzzi is also more rust resistant than any other strain we have developed, and while none of our seed of the old strain has ever shown any great susceptibility to rust, the new strain is almost entirely free from it. The seed we have for sale is all carefully recleaned and graded, and tested for germination and vitality.

Prices: New Strain Coker's Pedigreed Abruzzi Rye, per Bushel, $4.00; Ten Bushels and Above at $3.80 per Bushel; One-Half Bushel at $2.10; Peck, $1.15.

Grain Breeding and Test Plots on One of Pedigreed Seed Company Farms.

Coker's Pedigreed Fulghum Oats

Description—The Fulghum Oat is admitted by growers and breeders to have earned a permanent place as a valuable variety for the South. It and the Red Appler rank easily as the two most satisfactory varieties for Southern conditions. The Fulghum is ten days or more earlier than the Red Appler, and thus is especially valuable to the large planter in extending his harvesting period, also it works to better advantage in rotation with cowpeas and corn.



Fulghum Oats fill well, and have a plump, heavy grain. It is not so tall as the Red Appler, and has a very stiff straw, so that it seldom lodges badly. It is more successful in resisting cold than the Red Appler, and this is frequently a great advantage. If planted early it is rarely injured by rust, as it ripens usually before the hot weather of spring comes on, and it is also rarely injured to any extent by smut, two very important characteristics.

While Fulghum is primarily planted in the fall as a winter oat, it is also the best oat for spring planting in the South. As a winter oat, it should be seeded during late October or in November. As a spring oat, seeding about the first week in February for this section is recommended. A much heavier rate of seeding is required in the spring than fall.

Range of Adaptability—The Fulghum Oat is adapted for cultivation throughout the South. It is extensively grown in every Southern State, and is one of the most important varieties as far north as Kansas.

Realizing the good qualities of this variety and the unique place that it fills in Southern agriculture, our breeders selected it for further improvement; with a view to ascertaining whether the Fulghum variety was made up of one pure line family, all the individuals of which were alike, or of several pure families which when isolated and tested might show great differences in value.

In order to ascertain this a large number of individuals were selected in the spring of 1915 and the best of these were planted in plant-to-row tests that fall. The results were gratifying, the yield of the individuals ranging from 64.9 bushels per acre in the lowest, to 95.9 bushels in the highest.

COKER'S PEDIGREED STRAIN NO. 1, offered for sale for the first time last year, is descended from this highest yielding row. Reports that have been had from growers of this strain during the past season have been very complimentary.

These seed have been carefully recleaned and graded. Careful tests show all lots to germinate ninety-five per cent. or above and ninety-nine per cent. or over physical purity and trueness to name. The low prices at which we are offering our pedigreed strains of Fulghum are not indications of their true merit; we are making these prices low to enable a wider distribution, thus making them a benefit to more growers and to the South as a whole.

Prices: Coker's Pedigreed Fulghum Oats, Strain No. 1, per Bushel, $1.35; Twenty Bushels and Above at $1.25 per Bushel.

COKER'S PEDIGREED FULGHUM STRAIN NO. 2—Descended from the highest yielding progeny in our 1916 plant-to-row tests of this variety, it has continued to demonstrate this high yielding quality. As shown in the accompanying chart, its average yield during three years, 1918, 1919 and 1921*, of very accurate and carefully conducted variety testing has been 60.37 bushels per acre; while the average for Strain No. 1 was 48.33 bushels, for Red Appler 48.38, and for 100 Bushel 51.03 bushels.

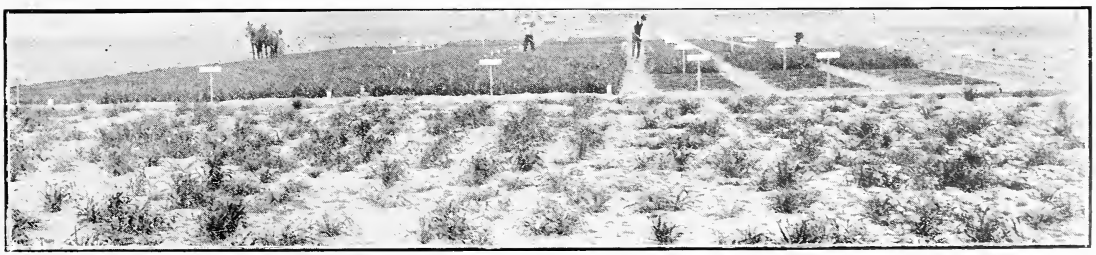
This shows Fulghum Strain No. 2 to have produced 12.04 bushels more than Strain No. 1; 11.99 bushels more than Red Appler, and 9.34 bushels more than One Hundred Bushel, and an average increase over the three of 11.12 bushels per acre, or 22.58 per cent.

This means that if the grower makes 25 bushels per acre with the average variety, that with Fulghum Strain 2 he should make 30.66 bushels; an increase of 5.66 bushels per acre, which sold at feed oat prices, say 60 cents per bushel, would give him $3.39 which would more than pay for his one and one-half bushels of planting seed. In other words, this would give him his planting seed free, and he would have a much better stock of seed either for planting, feed or sale the following year. This difference in bushels per acre increases as the yields increase in favor of the best seed.

With the performance record that this oat has behind it, we have no hesitancy in recommending it to our customers, as we believe it is the best Fulghum strain on the market today. This oat contains 70% meat and 30% hulls. If produced under the best conditions it will weigh from 37 to 38 pounds per settled, struck bushel. Our Strain No. 2 Fulghum Oats are somewhat weather stained, due to wet weather before harvest. This does not affect their value, however, as their germination is up to our usual standard.

Prices: Coker's Pedigreed Fulghum Oats Strain 2, per Bushel, $2.10; Twenty Bushels and Above, $2.00.

*1920 test ruined by cold. *1922 test ruined by lodging.



Grain Breeding and Test Plots on One of Pedigreed Seed Company Farms.

Our Method of Seed Breeding

The selection and testing of individuals and the propagation of the progeny of the best is recognized as the basis of both plant and animal improvement. In pedigreed plant breeding a large number of the best individuals are chosen each year from the best strains of the preceding year. These are tested the following year by the plant-to-row method, and all are finally discarded except that one which by the yield and performance record of its progeny is proven to be the superior individual. The seed of this superior individual is multiplied as rapidly as possible, and within four or five years may be offered for sale, as pedigreed seed.

Our new strains of seed sold as "Pedigreed" thus go back in record to a single superior plant selected about five years previously, and handled with great care to keep it pure. It is thus a pure family, coming from the most superior plant of its generation. Selections are made every year from the superior rows, and this process is continuous, and has been operating here for twenty years. No other scientific plant breeding concern has operated so long or has produced results so beneficial to Southern agriculture.

Pedigreed Breeding as applied by the Pedigreed Seed Company means that every year a new strain or family is started of each variety from the best plant of that variety selected the preceding year.

As the selected plants are each year taken from the best progenies in our plant-to-row tests, the pedigrees of our different strains are continuous.

Why You Should Use Pedigreed Seed

You farm to make money. The most money is invariably made by producing large crops of uniform high grade. Under given conditions, the largest yields of best quality are made when the best seed is used. You cannot make the best crop unless you use the best seed.

In order to determine what advance we are making in our pedigreed breeding, we every year conduct careful variety tests, where our pedigreed strains are grown in fair competition with general non-pedigreed seed of the same variety and with many standard varieties which we are not breeding.

The following table shows the results obtained with Pedigreed Abruzzi Rye for the last two years.

Chart Illustrating Comparative Average Yields of General Seed With Coker's Pedigreed Seed of Abruzzi Rye.

	Bushels Per Acre 1920	Bushels Per Acre 1921	Bushels Per Acre Average
General Seed	32.90	32.5	32.7
Coker's Pedigreed Seed	48.08	37.3	42.69
Increase	15.18	4.8	9.99

These trials gave a gain of nearly ten bushels per acre in favor of the pedigreed seed so far as yield was concerned, and the grade of the grain was also much superior.

A similar test of our Pedigreed Red Appler Oat in comparison with general seed during the last five years has shown similar results. We have no Red Appler seed for sale this year.

What We Have Accomplished

The establishment of the Long Staple Industry in South Carolina has been due to the efforts of the Pedigreed Seed Company and the Coker Cotton Company, both headed by our Mr. D. R. Coker. This industry has added millions of dollars to the income of farmers, given employment to many of our citizens and has done much to advertise South Carolina.

During 20 years of careful, scientific pedigree breeding we have bred and introduced Deltatype Webber, Lightning Express, Webber 49 and 82, the Hartsville Long Staple uplands and all of the later strains of each. These cottons bred on our farms and first grown locally have increased until today they constitute the bulk of the staples grown in the Carolinas and we believe fully half of the long staple cotton grown in the long staple sections of the Mississippi valley. The popularity of these cottons is due to their greater earning capacity under boll weevil conditions. In addition we have done much work with short cottons, having bred, and introduced two pedigreed strains of Cleveland Big Boll, also two strains of Pedigreed Dixie (wilt resistant), that stand with the first in yield and quality.

Our Pedigreed Garrick, Williamson and Ellis corn varieties and later strains selected for yield, quality and wide adaptability are very generally planted in the cotton belt east of the Mississippi. Our breeding work with Amber Sorghum started in 1910 has also been very successful. We have produced a very distinct type from parent with semi-cluster head and very large, partially covered seed, and that produces more seed per acre. The stalks are large, more juicy, sweeter, and keep better in the field.

The Abruzzi Rye first sent out by us and our later pedigreed strains of this rye have become the principal ryes grown in the South. Our Pedigreed Fulghum and Pedigreed Red Appler Oats are grown extensively throughout the South.

Promising Strains Not Yet Introduced

After much variety testing and considerable breeding work with Blue Stem, Leaps Prolific, Golden Chaff and Red May Wheats, our tests showed conclusively that the Red May was the best variety for our section of the cotton belt. We have a pedigreed strain of this wheat from a plant selected in 1916 that during four years accurate testing has averaged 36.15 bushels per acre in our test plots, 24 per cent. more than parent strain. We will have seed of this strain of Red May to offer in 1923.

Since 1915 we have been breeding a strain of Webber 49 on heavily infested wilt land, selecting each year those plants that showed resistance. This year we have an increase block from one of these best progeny rows in 1921 breeding patch that is planted in a variety test on very heavily infested land, each variety and strain being repeated four times. This progeny shows more wilt resistance than Council Toole, Dixie or Dixie Triumph. It is very prolific and has a good 1 3-16 inch staple.

Our sweet potato work dates back to 1915 during which time we have done much variety testing and breeding. In our 1921 hill-to-row of Portorican the yields of individual hills ranged from 204.8 bushels to acre in lowest to 418.6 in highest and in the Cuban from 220.5 in lowest to 361.3 in highest.

The best of these progenies are in increase blocks and variety tests this year and we have every reason to expect great things from them. Men and companies are judged by what they accomplish. This Company has achieved an enviable reputation by what it has accomplished.

Coker's Special "Clipper Seed Cleaner"

Removes all light, immature, and worthless seed and all trash and foreign matter, by double screens and vertical air blast method. The most effective seed grader on the market. DOES EFFECTIVE WORK with all Southern seeds, including Wheat, Oats, Rye, Barley, Cotton, Cowpeas, Sorghum, Soy Beans, Burr Clover ,Kaffir Corn, Vetch, Milo, Maize, Alfalfa, Millet, Rape, Crimson Clover, Onion Seed, etc. All "Coker's Special Clippers" are fitted with a special assortment of TWELVE SCREENS.

Simple in Construction—Easy to Operate—No Complicated Parts—No Extras—Will Last Indefinitely—Operates by Hand or Power.

Prices

Our prices are for cash with order. If remittance is not sent with order, it means a delay until we can write you and receive the amount. Customers who have established their responsibility may have shipments made with sight draft attached to bill of lading. Remittance may be made by personal check, bank check, money order, cash, or stamps. We are not responsible for your order until it reaches us.

All prices quoted in this circular are f. o. b. Hartsville, S. C.

How to Have Seed Shipped

Small shipments to a distance are usually cheapest by express or by parcel post. If you are not sure about cheapest way to have shipment made, send us a sufficient amount to pay charges, and we will send cheapest way, and return to you any balance after paying charges.

Large shipments are always cheapest by freight. If your station is a prepay freight station, the amount of the freight charges must be added to your remittance.

Our Responsibility

Our seed are all carefully tested for germination and purity before they are sent out. Attached to every bag of seed we ship is a card on which is printed the percentage of germination and purity of that particular lot of seed. In no case do we ship seed that do not measure up to the highest standard. In no case, however, do we give any warranty, expressed or implied, as to descriptions, quality, or productivity of our seed.

EXAMINE OUR SEEDS when you receive them, and test them in any way you see fit. If for any reason they are not satisfactory, they may be returned to us within ten days after they are received, in the original package, AT OUR EXPENSE, and WE WILL REFUND ENTIRE PURCHASE PRICE. We waive all responsibility for seeds which have been in a customer's hands more than ten days, as the vitality of any seed may be lessened or killed after leaving our warehouse, by subjection to moisture, heat, brine, chemicals, etc. Under no circumstances will we be responsible for the germination of seed after they are planted, whether within ten days or not, as there are many reasons for imperfect germination of planted seeds other than their vitality. If purchaser does not accept seed under this condition, they are to be returned at once.