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Real Helps for the Jarm



With everybody so busy these days . . . these reminders just might help some important job getting done, instead of slipping by. How about keeping this book where you can refer to it often? Maybe one certain night each week—as your "memory checker" for those seasonal chores you have in mind.

All Year 'Round

JANUARY Set definite plans for farm's operations this year. . . . Keep records— KNOW what's what. . . . Budget a certain sum each month for War Bonds. . . . Isn't this the time to roast (or sell) ALL roosters not actually needed for breeding? Prepare ewes for lambing—treat for parasites. . . . Mate turkeys. . . . Top-dress wheat field with manure.

FEBRUARY Repair brooder house.

Overhaul tractor, mower, other machinery. ... Set and sharpen saws. ... Rush spring plowing. ... Sell saw logs. ... Feed brood sows legume hay. ... Estimate fertilizer, spray materials and order them. ... Rush pruning in orchards. ... Are the plows, harrows, cultivator shovels all in good shape? Lime pastures. ... Are all seeds ordered now?

MARCH Finish spreading manure on cropland.... Top-dress alfalfa.... Spray peach trees.... Clean up remains of corn crop, cobs, fodder, and burn it to destroy cornborer.... Fix fences.... Repair and grease harness, making sure each set fits the animal to wear it.... Feed ewes more grain. ... Is the garden ground all ready? Keeping up all those account records?

APRIL Sow oats with Canada peas for early green feed, spring cow pasture. . . . Creep-feed early lambs. . . . Sow emergency poultry pasture. . . . Feed bees soy bean flour. . . . Check corn-planter—everything O.K.? Paint, whitewash. . . . Set strawberry plants early. . . . Apply superphosphate or a complete fertilizer to pastures. . . . Is silo ladder in shape?

MAY Don't plant that corn too thick. . . . Check lightning rod connections. . . . Spread pasture droppings with harrow. . . . Move bees into orchard. . . . Get hogs on pasture. . . . Use a good dairy disinfectant. . . . Cows, sheep and pigs might well use some iodine. . . . Kill weeds in corn field and potato patch before the corn and potatoes come up. . . . Use weeder and spiketooth freely.

JUNE Cut milk stage oats for hay. ... Scatter poison bait for cutworms (page 38). ... Plant sudan for quick pasture. ... Creosote the empty wood silo. ... Kill worms in sheep. ... Cultivate corn only to keep down weeds—always shallow. Deep working loses moisture, severs the young hair roots the plants need badly. ... Sprinkle superphosphate on manure pile. JULY Put pullets on pasture. . . . Rape sown now, 6 to 8 pounds per acre, makes fine fall pasture for breeding hogs and pigs. . . Overhaul the silage cutter. . . . Plant sweet corn for fall roasting ears. . . . Salt hay in the mow. . . . Provide salt in the pasture. . . . Treat stunted pigs for worms. . . . More eggs if chicken lice are killed (page 32).

AUGUST Everything in shape for filling the silo? Fumigate buildings for moth and vermin. . . . Haul lime. . . . Fertilize berries. . . . Avoid overgrazing pastures. Sow rye for fall pastures—rye grass very fine, too. . . . Seed next year's poultry range. . . . Keep salt before stock. . . . Kill the rats. Get fine seed bed ready for barley and wheat—order new Hoffman Seed. . . . Are all your cost figures and records up to date?

SEPTEMBER Sow cover crops early. . . . Patch thin spots on lawn. . . . Spray for flies; avoid fixing cows' bots next winter. . . . Late cutting and pasturing of alfalfa will hurt next spring's stand. . . . Wean lambs. . . . Mark trees in wood lot to remove next winter. . . . Disinfect the dairy now. . . . Drilling fine limestone does better job than broadcasting same amount.

OCTOBER Orchard clean-up time. . . . Check all chimneys. . . . Pick milkweed pods. . . . Store all corn silage possible. . . . Ever investigate emergency snow fence silo, or trench silo? Set bait stations for mice (page 33). . . . Treat peach trees for borers. . . . Clean garden—put on a green overcoat (page 6). . . . Any field need lime—still time!

NOVEMBER Butchering tools all ready? Tuck bees in for winter. . . . Put rabbit guards on small trees. . . Drain low spots where corn drowns out. . . . Saving scrap for Uncle Sam? Kill poison ivy (page 37). . . . Grease and oil all machinery; order needed repairs. . . . Cull undesirable ewes. . . . Pruning time. . . Mulch berry bed. . . . Prepare income tax return. Aren't those records helpful now?

DECEMBER Ventilate dairy barns. . . . Is all machinery under cover? Antifreeze provided? Feed legume hay to brood sows. . . . Walnut logs are worth real money now. . . . Remove chill from all the livestock's drinking water. . . . Clean dust from chicken house windows to get all vitamin D possible. . . . Spread manure soon as formed. . . . Are all broken window panes replaced now?

Helpful on Any Farm, Any Time Hoffman Quality Seeds

Among farm folks

has always been a warm, helpful, neighborly spirit. The strain of wartimes has helped make it all the stronger.

Young folks of today come through with resultful effort unthought of some years back. Those three smiling lads seated on the hay bales on the front page . . . who wouldn't give a lot for the many real helps they can render each day! The same can be said of today's farm girls and women. The spirit is wonderful. And how they help get the many farm jobs done!

In what rural section, when sickness, accident or death strikes, is there not the quick neighborhood response—to husk the unfortunate's corn, harvest his crop, raise the new barn, loan a team, tractor or other equipment? To help out over the hard luck spots.

Contacts with such neighborly folks twelve months a year lead naturally to such a book as this one now in your hands. It tries to be a helpful, friendly book, with useful information to serve as a planting guide. Suggests practices to save you time and boost your production. Presents straightforward details on the seeds offered for your purchase.

Months have been spent gathering for you the kind of seeds that will help make good farming pay better. Naturally, the hope is that you will purchase from these supplies, and put these fine-quality seeds to work for you.

Taken altogether, the aim of this book and the folks back of it is the offering of practical help. Help which you can turn into profitable use on your farm this year.

A. H. HOFFMAN, INC.

LANDISVILLE (Lancaster County), PA. "DEPENDABLE FARM SEEDS SINCE 1899"





Here's the Situation and what to do about it

The situation is not good. Certain seed crops are very short. Others hardly exist at all. Worst is alfalfa. Next, alsike clover. Some others are bad, too. Many folks planning to sow alfalfa just can't get the seed for it. The crop was a nearfailure, and is needed for re-seeding in its own producing sections.

Just What Can Alfalfa Growers Do?

- 1. Will they take a chance, sowing doubtful seed?
- 2. If new seedings cannot be put out, can old fields be doctored?
- 3. Will liming and fertilizing help them through?
- 4. Can new seedings of other seeds be put onto old sods successfully?

Point 1 is covered on page 19. To points 2, 3, and 4 the answer is "yes."

One man's alfalfa was getting thin. Did his soil need lime? Topsoil and subsoil were sampled. Their tests revealed a shortage of calcium for proper legume growth. So he worked the field both ways with a toothed roller pulled behind a springtooth harrow, just as early as he could get to the ground. (A light discing—discs set straight—would also do it.) He applied 2 to 3 tons ground limestone per acre, harrowed it in. Later a heavy application of superphosphate. (4 to 500 super, or of 0-14-7 or 0-12-12, depending on the need, would serve fine.) By annual treating with lime and super, he got excellent crops—his eighth year was still very productive.

replenish help old Ladino to stands, without plowing. This has been accomplished with disc or springtooth or spiketooth harrow, and then seeding on top. Followed immediately with cultipacker, or roller. Broadcasting Ladino and its companion seeds on frostcracked ground has worked fine. Ladino seed beds must be properly limed and sufficient plant food applied in the form of manure with superphosphate, or complete fertilizer. If lime did not get on this ground in the fall, it can be applied on frozen ground. Then soon as weather permits, fertilizer or super can follow.

Ladino to help establish new stands of splendid hay, of pasture ... and of grass silage, if wanted. Yield on fertile soils in favorable seasons; has equalled or excelled alfalfa in quantity and feed value. Its high-acre, three-way value makes its use advisable on the finest cropland, once considered too valuable for pasture only.

Ladino clover alone or with other seeds must be well fertilized. It is a heavy yielder, must be given enough feed, is a heavy feeder. No other legume recovers so quickly after mowing or grazing. Ladino is good on drained land where alfalfa thrives. Tolerates excess moisture better than does alsike clover....Certain other seeds are to be sown with Ladino for the new stands discussed here—depending on various conditions. Read sowing formulae and other details on pages 7, 18 and 41.

Ladino and Timothy for Hay. Also for grass silage and pasture. Seven pounds timothy with 2 pounds Ladino per acre. On fertile soils of good moisture-holding capacity, where the maintenance of Ladino for longest possible period is desired. Some will use Red Clover to supplant alfalfa. It wasn't many generations ago when all red clover—no alfalfa —was the general practice. So why not now, in such an extreme emergency? Everybody knows its all-around value. There is more good red clover seed available this year, too. Turn to page 14 of this book and read about this year's seed crop.

Timothy will go on many a thinning stand of alfalfa. These two grasses get along together. Make good combination hay. One man says to patch alfalfa with some timothy, seed it after the last cutting—and get more hay next spring at low cost. Refer to page 17.

Birdsfoot trefoil will find new users. Northern areas can handle this grass first-rate. Deep-rooted, lasts several years. Grows on even poor to acid soils. In high fertility, was reported to outyield red clover. Continues growing through the hot months. One authority suggests 3 pounds birdsfoot, 7 pounds each orchard and tall oat grass. . . . For hay from long-term meadows, use 4 pounds birdsfoot with 6 pounds timothy. See page 41.

Brome grass a great partner for alfalfa. This year—without new alfalfa to sow with it—brome will doubtless get some calls to help revive old stands of alfalfa. Starts slowly. Southern areas might apply it toward fall for value the following spring. Northern areas, this spring. Full details, page 42.

Mammoth Clover . . . for two years of hay . . . on dry soils of lower fertility



Manure—lime—fertilizer . . . when was ever another year that these three were more essential to Uncle Sam's great big farm job? Their liberal use and proper management are certainly vital factors today. It is hoped the suggestions about them listed herein may prove helpful.

... or on soils wet in the spring, dry in the summer—this mixture: 8 pounds mammoth clover, 5 pounds timothy, 3 pounds of red-top grass. Read page 15.

Lespedeza... for Maryland, Delaware, and to the south. Inexpensive seeding. Sown in early spring, provides pasture before fall. Not dependable for Pennsylvania and North. See page 44.

Wider Use of Forage Crops Urged ... Sudan, sorgo, soy beans . . . for hay, green feed, emergency pastures. What could be better than to strive for all possible home production of the feed you need? Soys, planted for beans, are very helpful. The dairyman shown below wisely feeds soy bean meal, which contains high-quality protein, to keep milk production at a high level.



Hoffman Quality "Rye Grass" ... the Number One Cover Crop

Tremendous acreages are now in use each year -the gain has been rapid. Pictured below, Hoffman rye grass from a Frederick, Maryland, garden—December 1. Note the many long leaves, vast fibrous roots, the mass of valuable topgrowth.

More and more Hoffman patrons sow rye grass seed at the last cultivation of corn for finest cover crop (about 24 pounds—1 bushel—per acre). Valuable as fall and spring pasture. Except for almost complete absence of moisture, Hoffman rye grass provides about the surest cover crop. Market gardeners sow it after vegetable crops. Reduces loss of plant food from soil packing. Potato growers are real boosters. Good on poultry ranges. A New Jersey orchard man uses rye grass and vetch to conserve soil and maintain humus. Several folks sow in the orchard, gaining extra pasture in spring while saving the soil, and then disc under for fertilizer to feed tree roots. A Pennsylvania potato man discs his last-year potato fields in the spring, sowing six pecks of oats with 10 or 12 pounds red clover. The rye grass comes fast in the spring. After the oats is combined, the clover competes with the rye grass in the warmer period. Next spring clover, rye grass and oat straw make considerable organic matter to turn down for another potato crop.

Rye grass is being sown with buckwheat. Buckwheat stubble is loose and apt to erode badly. Rye grass provides a winter cover crop after buckwheat crop is harvested-to stop soil washing away. Hoffman rye grass is top-quality seed thoroughly cleaned and recleaned . . . not costly at all this year. Order early.

Better Seed Beds Save Seed and Owner's Money

More attention paid to better seed bed preparation could greatly re-duce seed requirements. A great many seeds sown never get a de-cent chance to start . . . when the ground is not in shape to help them do so them do so.

With present good plows, discs and cultipackers, many more folks should do this preparing job better. It would help conserve the very short seed supply, and they'd save money!

seed bed preparation Proper means including lime and fertilizer whenever needed. And really work-ing both into the soil!

Important Wartime **Livestock Feed**

Rye grass makes good forage for pigs and other animals, provided supplementary protein is supplied in the grain ration. Satisfactory growth will be made if pigs on rye grass pasture are full fed at least a 12 per cent protein mixture. In feeding trials, pigs on rye grass pasture gained 1.14 pounds daily when full fed a 12 per cent protein ration (corn 87.5 pounds, tankage 6 pounds, soy bean oil meal 6 pounds, and salt .5 pound). pound).

Save the Soil

Soil is conserved and built and erosion is **reduced** by any means which provides a ground cover to absorb the impact of raindrops and which increases organic matter, and thus improves the permeability of the soil, causing rain to be absorbed— not shed. No better crop for it than GRASS.

Fertilizer for 1945

For corn, on well-manured, fertile soils, use superphosphate. Otherwise, use 3-12-6, 4-12-4, or a similar formula.

Oats and soy beans following manured corn or potatoes will do well with superphosphate. Otherwise, use 3-12-6 or 4-12-4.

Pasture improvement, without manure, on the poorer soils use 400 to 500 pounds of 4-12-4 or 3-12-6. Under high fertility conditions, with manure, superphosphate can be used instead of the complete fertilizer.

For special conditions consult your experiment station or county agent.

Ladino Ranges

A New Jersey poultryman says Ladino will become more and more important for poultry ranges, because it is high in proteins and vitamins, can be cut often, and makes good grass silage.

Buy War Bonds

Many a good farmer will be in a safer position at the end of the war with a moderate mortgage at today's low interest rate, and a good nest egg of War Bonds . . . than if he has no mortgage, no bonds, and badly depleted buildings and equipment. . . . Aside from the investment angle, we all have the moral responsibility to fully share in backing our fighting men.

Hoffman "Ladino"

A Real Lifesaver This Year

Ladino is doing a great job . . . remarkable what a single pound can do on a whole acre of land! A supply is here for early buyers. The great demand expected could exhaust it. Page 4 tells some uses of Ladino. Also read 18 and 41.

Ladino is a perennial white clover. . . . Roots are vigorous. Spreads by runners. Its sturdy stems hug the ground, cover the surface. Gets along so well with other legumes and grasses. Ladino keeps coming—after cutting, and after grazing. Several cuttings per season are often made. If cut early, Ladino shows higher protein than alfalfa. . . . Don't pass up its possibilities!

Dairymen know Ladino demands heavy grazing for short periods. Under rapid growing conditions, may require up to 8 or 12 cows per acre at one time to keep the grasses down. Frequent rest periods should be given Ladino pastures to make good new growth and build food reserves in the roots.

Fertilizer for Ladino is most important. Such a heavy producer is a heavy feeder. Manure plowed down or worked into the seed bed is fine. When seeding, apply 400 to 500 pounds of 4-12-4 or 3-12-6. Fertilize each year, September preferred. Fine plan is to add at least 50 pounds superphosphate per load of manure. Eight or 10 loads would be fine. If no manure available, add 300 to 400 pounds 0-14-7 or 0-12-12 annually.

Is Inoculation of Seeds Necessary?

The answer is definitely "yes" . . . EVERY time! At every sowing of legume seeds. The benefit so much, the cost so little.

HOFFMAN INOCULANT IMPROVES YOUR SOILS AND LEGUME CROPS

Grow your own nitrogen! Help every acre you sow to legumes do a better job for you. Clovers, alfalfa, soy beans, vetch, peas, etc. They all have the ability to gather nitrogen from the air while growing, and deposit it at their roots. Applying Hoffman Inoculant to the seed you sow helps every such plant do better. Take soy beans, for instance; if not inoculated they rob the soil, but inoculated properly they are real soil-builders!

GREAT PROFIT AT LOW COST

One careful test showed 40% more clover, 33% more soy beans, 67% more alfalfa . . . actual-byweight crop increases over those from un-inoculated seed.

You just can't get such returns elsewhere on the farm—say \$20 to \$40 gain in crop value, by investments of maybe 10 to 20 cents an acre. Fifteen cents' worth of alfalfa inoculant has returned 1,680 more pounds of hay to the acre. Oats following inoculated red clover has done twice as well as oats after timothy, because of that nitrogen-catching inoculant. The nitrogenfixing bacteria of Hoffman Inoculant stay on the job for you. Producing good dark green plants, adding nitrogen-filled nodules to their roots, making extra crop and soil values for you.

Order Hoffman Inoculant for each legume seed.

The treatment that is good for clover is not good for alfalfa. Nor soy bean treatment for vetch, etc. Hoffman Inoculant is GUARANTEED a pure, live, fresh culture, and to produce nodules. Its quality and efficiency are unquestioned. Order for every seeding of legumes you put out . . . yes, even if you had inoculated that soil before . . . no telling what chemical changes have taken place in it since then. Your investment is so small . . . returns big! See price list.



Neglect of proper seed inoculation helps cause crop failures. Without these bacteria to produce nodules on the roots, and supply the crop with free atmospheric nitrogen, the legume plants must depend entirely on the nitrogen in the soil. The nitrogen-gathering bacteria give any legume its value. Without them, it will be pale and unthrifty, will not produce large yields of a high-protein forage (protein is another name for nitrogen), will soon be choked out by weeds, and will often leave the soil poorer.

Note (above) the fine healthy alfalfa leaves of inoculated plants. And the crop difference in the soy bean picture below. How much bigger the inoculated plants in the man's right hand.

Seeds of all legumes (all the clovers, alfalfa, peas, soy beans, vetch) should be inoculated EVERY TIME sown! Cost is very small returns great!



Hoffman Seed Oats Assure You Enough Grain for Your Mixed Feed Next Winter

Feed Grinders Help

They add no more nutrients, but do help prevent waste. Some animals can't do their own grinding too well, meaning that some grain passes through without good digestion—a feeding waste. Grinding makes some feed more palatable, induces stock to eat more of coarse part of the roughages, such as stemmy soy bean hay, corn and sorghum fodders.

Saving Protein Is Not Enough

Enough More protein must be produced more high quality hay, better use of pasture, more home-grown grain. Your grain field is highly important. With 600 pounds of 30 per cent supplement and 1,400 pounds of your own grain, you can make a ton of feed with 16 per cent protein content. In the present situation, this mixture with good hay (with one-third or more legumes) will do the feed job. If your hay is poor, you'll need an 18 per cent protein allowance which you can get by adding 1,200 pounds of your own grain to 800 pounds of protein supplement. Whatever feed you need—to feed straight, to mix, or grind—it takes raw materials to provide it. Some farm somewhere has to produce them ... why shouldn't it be YOURS?

Oats-growing is not the gamble it used to be. Great steps forward have been made in strains that do what old types couldn't. Today there is new ability to grow more oats to the acre—to resist diseases that used to pull the crop down to low yields. Too many times and places has "feed" oats (called "seed") been sown. Its low cost per bushel wound up costing the user many bushels lost by disease, attacks of rust and smut, weak straw, weed damage.

Important for oat success: 1—Well-prepared seed bed—firm underneath, a few inches loose on top, and fertilized as needs demand. 2—Sow early. There's a loss of a bushel yield per acre for each day lost after you can plant. 3—Use enough seed, 9 to 10 pecks by measure (that means about 12 pecks by weight, of heavy seed). 4—Treat seed with Improved Ceresan . . . it pays! 5—Assure yourself of good, clean seed of a proved variety from vigorous parents.

Next pages offer you splendid seed-oats help.



HOFFMAN ``VICLAND'' OATS

Early . . . Disease-Resistant . . . Heavy Yielding

That page you just turned told about great progress in seed-oat production. About new ability to resist disease and give good grain yield. Here in this Hoffman northern-grown Vicland oats is a number one example of such seed.

Thousands of Hoffman customers today know the exceptional value they get in hybrid seed corn, resulting from the Funk G breeders and Hoffman's research-proving program. . . . Here is a similar situation—resulting from a thorough hybrid-breeding background. Vicland oats has been developed from two strains, one a good old-type oats of the Midwest, the other a strain always very resistant to stem and leaf rust and certain smuts. Successful inter-breeding of developments from these strains has produced this fine Hoffman Vicland seed.

A widely spread number of Hoffman patrons planted Vicland seed in 1944 (anything but an ideal oat season). Here are notes on just a few of their many fine experiences. From customer Fehlman, Warren County, Pa.—"Your Vicland seed threshed 68 bushels per acre, the other oats made 50 bushels." McChesney, Westmoreland County, reported—"The Vicland was the best oats we ever had." Cullen, of Morris County, New Jersey, said he "was more than pleased with the crop." Berry, Allegany County, liked his Vicland Oats best—"which gave us 62 bushels per acre."

Vicland has proved wonderful when disease began to severely hurt other nearby oats. Even in seasons when disease was not bad, Vicland has often outyielded other types considerably. Annual records in various oat-states show Vicland leading other strains from 20% to 40%. In

A Plowing Tip

Fall plowed oats ground can be made more effective by not working too deeply in the spring, in order to produce a solid seed bed. Disc thoroughly and level.

Keep Young Calves Off Pasture Lots

Temptation to save feeding bother and pasture them early, often proves costly. Kept in first 12 months, barn fed, they grow out better—can be bred to fresh at around 24 months. Calves need dry warm pens, well ventilated—to avoid scours, colds, pneumonia. Avoid drafty places. Exercise lots, close to barn and feed supply, help. So do hay racks, feed boxes and clean water. False bottoms in calf pens, of slats 1½ to 2 inches wide, raised 6 to 8 inches from floor, were found an advantage.

Winter Wheat After Soy Beans

Since soys leave the field loose and fairly weed-free, a light harrowing or discing will adequately prepare seed bed. Wheat following soys should always be well fertilized something like 300 to 400 of 3-12-6 or 4-12-8, even of fertile soils.

Inspect Tractor Often

Too many tractors are never looked over until a breakdown holds up the whole busy program. Important items to watch are oil filters, air cleaners, water cooling system and other motor parts. Note: 10 hours' operation of a tractor compares with 500 miles of motor car use.

Plan Ahead . . . Early

To avoid feed shortage headaches next winter . . . grow all possible hay and feed-grains. Crops like soy beans, sudan, grain sorghums, millet—whichever ones promise to be best under your conditions.

Fall-Spread Manure

A load of manure spread in the fall may be worth two spread in the spring. Manure permanent pasture in fall—the closest grazed parts. After ground freezes, manure late-sown barley or wheat. Before ma-nuring pasture, apply lime, follow-ing with superphosphate.

Control Grain Moth

Storage granaries and bins should be fumigated to rid them of Angu-mois moth. Do this in hot weather. All cracks should be made tight. Place carbon bisulphide in shallow tins on surface of grain. Extreme care must be followed when using inflammable chemicals inflammable chemicals.

More Winter Grain to Help **Feed Situation**

More winter wheat, barley, rye-could be grown on most farms at small cost. Divides the risk of try-ing only for spring-sown grain. Helps out a lot for poultry or live-stock feed. Furnishes more straw. Modern tractors and discs simplify seeding. New Hoffman Seed has insured higher yields for thousands . . . will help you too.

Salt and Water for Work-Horses

Prevent loss of work stock from heat exhaustion. Horses and mules, if allowed free access to salt morn-ing, noon and night, and watered about each hour while working, can be helped greatly.

Lime and Manure—a Good Square Meal for Most Any Soil

Adequate liming when getting a seed bed ready, followed promptly by thorough harrowing or discing, is very important. Lime should be worked down deeply as possible to become effective sooner. Top-dressing winter grains with manure protects, fertilizes, brings improved results.

"VICLAND" OATS (Continued)

Pennsylvania in 1943 (classed as a diseaseprevalent year), Vicland led Patterson by 40%, and Beaver by more than 20%.

One big point about Vicland is its earliness enabling it to escape late drought damage.

Vicland produces heavy heads on short, stiff straw, is very resistant to lodging. This trait is liked by everybody using Vicland, even though longer-strawed oats were always popular. Vicland's plenteous thin-hull heads help account for its high grain yield. One 1944 user (Mr. Barley, Blair County) reported better than 40-pound weight per bushel. Hoffman-customer experience with Vicland bears out experiment station findings that disease-resistant Vicland outyields many older types by 20% to 30%.

You notice in the above the enthusiasm of Hoffman customers. And there is no greater satisfaction in the seed business than to offer a worthy strain that has PROVED its ability. It may well be true that the time for "No more bad oats years" has now arrived. Demand for this true northern-grown Hoffman Vicland seed will be heavy. Supply is not great big. Quick orders are urged. Both uncertified and certified Vicland seed is here, both fine quality—either lot well able to do a fine job. Let it work for you!

HOFFMAN ''VANGUARD'' OATS

Northern grown, true type, produced from registered certified seed. For our New York State and New England friends who have come to greatly like this variety. A hardy, vigorous, good-yielding tree-type. Large, plump grain. Clean, tested, sound seed. Supply is limited and cannot be replaced. Please order Vanguard early.

TREAT ALL SEED OATS WITH CERESAN

This dust treatment is highly recommended by all authorities. Apply it to your seed, whatever the variety you sow. It helps increase the crop. Protects against oats' enemies that might injure even disease-resistant types. Costs so very little. See page 21.





HOFFMAN "VICTORY" OATS Vigorous Grower ... Heavy Cropper ... Very Popular

Year after year, for nearly twenty, here is the oats that has given Hoffman customers fine returns. Often making yields 8-10-20 bushels per acre, BETTER than many neighboring fields.

Always noticed is its vigor in pushing up large spreading heads of good kernels. This vigorous trait, plus its ability to put up a good fight in adverse weather conditions and come through with good crops of grain and straw, has made Victory the favorite variety it is today.

Each year many fine reports come from Victory users—like these 1944 lines: From customer Ferry, Bedford County—"We had very poor weather for oats this year, but our Victory did well. Our thresher said it was the best oats he threshed." Rodrigues', Rhode Island, letter said— "We were very much pleased with your Victory Oats. Tops and stalks were very heavy. Michler, Somerset County-"55 bushels per acre, 40 pounds to the bushel." Heutschel, Chester County—"Victory made 50 bushels per acre; very good in comparison to other yields around here. The weather was not exactly favorable." Reeser, Berks County—"Well pleased. Victory threshed 58 bushels per acre . . . very dry season . . . made large white kernels . . . solid grain, good feed . . . drew the attention of a lot of folks of this locality." Customer Hunt, New Jersey—"Excellent, about 45-bushel yield in spite of late seeding, followed by drought that threatened the crop."

Hoffman Victory grows tall straw that resists bad weather, wind and rain to a high degree considering the heavy weight of grain it carries. Makes good kernels, thin hulls, high feed value. One big Hoffman Victory advantage is its thorough cleaning. Means extra bushels at harvest. Another, its vigor, due to its production in the right northern locations. Has much more of this

Extra Phosphate

An excellent place to use it is in the cow stable. $1\frac{1}{2}$ to 2 pounds a day in the gutters and on the floor will reduce the loss of nitrogen from the manure and make it a better-balanced fertilizer. Also improve sanitary conditions in the stable.

Pigs and Explosives

A 300-pound porker furnished enough fat to make 30 pounds nitroglycerine, which in turn makes 60 pounds of explosives.

Silent Thief

A 4 per cent grade would be the same gradual slant you'd get by leaning a yardstick on a 1½-inch prop. Yet a 4 per cent sloping field in Ohio, through a 41-year check, lost 8.9 inches of soil! Corn had been its main crop. . . . Plow across the slope—make every furrow a dam—to hold the water . . . and the soil! Easier to work, takes less gas, saves yourself too.

Better Cattle Feed

Disc up permanent pasture; work in lime and phosphate, and make a seed bed for legumes without destroying the grass stand.

a seed bed for legumes without destroying the grass stand. Blue grass cut up with a disc soon has proved thicker and more vigorous than that which had not been worked. On treated ground it grew rank and leafy, was dark green in color and soon smothered out weeds. The treatment was still effective after 4 years and was 4 times as productive as an untreated acre.

Buckrakes Save Labor

There's other work for them besides at haying time. . . Bringing grain for threshing, hauling green corn fodder or grass to silage chopper, taking pea vines to the huller, and many other chores. Newer models are usually attached to rear of 1½-ton dump truck with hydraulic cylinder—or an old car with an extra axle added in front for the power lift.

Rotate Sheep Pasture

Two 4-acre patches of oat-rape pasture kept 40 lambs and their ewes going through summer and fall. Flock was turned out soon as oats were tall enough to graze and the rape supplied feed until it froze.

Turkeys Suffer

From cold rains, sleet, wet snow. Rains wet the feathers, causing them to lose their insulating value. Wet feathers can't keep turkeys' bodies warm. Drop in temperature could freeze wet feathers and cause death.

FARM FACT: An adequate supply of home-raised roughage and grains is the best livestock insurance in the world.

Right Time to Cut Ensilage Corn

The Indiana Experiment Station finds the right time to be "when the kernels are dented but not hard." If cut earlier when ears are in the milk stage, their analyses showed only 69 per cent as much dry matter present . . . only 66 per cent as much crude protein . . . only 43 per cent nitrogen, free extract . . . only 23 per cent as much fat. Since dry matter is the part that carries the feed, the rest is simply water. . . . So from these tests their "right time" surely checks as really right!

Sorghum, Horse-Feed

An Indiana farmer says sorghum is one of the best roughages a farm can grow. He runs the crop through a roughage mill. He said that horses and other animals grow fat on it without anything else added. . . . "That's all horses here get all winter."

FARM FACT: Yes, business before pleasure; but it is business and pleasure in visiting among the best farmers within your reach.

``VICTORY'' OATS (Continued)

important quality than home-produced or second-time oats could possibly show, even though the first crop was a good one. Uncertified and certified Victory seed is here as this is written. Demand will take them both. For there never has been a bigger call for any other strain. Based on its years of success for others, Victory will serve you well.

HOFFMAN ``TAMA'' OATS Resists Stem-Rust . . . Yields Fine . . . Ripens Early

A newcomer to the Hoffman list . . . but far from a new or untried variety. Already widely used in many mid-western states, where a good oat crop is a vital necessity. And Tama has several years' proof as a heavy producer.

1943 records in Pennsylvania showed Tama ahead of all other oats in a number of official tests. Parentage of Tama is similar to that of Vicland . . . being the result of developments from a hybridizing program that has really produced fine results. Chief ability of Tama, causing its splendid yield record, is its inherited fitness to fight off attacks of stem rust, leaf rust and covered smut. Such qualities in its blood just can't help to make it produce good crops disease years or not. Tama will see much wider distribution and Hoffman is happy to offer such fine seed of this very worthy oats . . . certified and uncertified seed—but only limited quantities of each. Order at once and be sure to have this quality seed all ready to plant early. Watch results—you'll get a crop that will surprise you!

SWEDISH TYPE OATS Variety Unknown

It would be hard to prepare a seed-oats guide without listing this popular old favorite. Every year its friends come back for some more of this good, clean Hoffman seed. High in germination —costs but little more than feed oats.

Medium-to-early maturity, good root structure, firm, tall straw and good yields have always stood out as Swedish characteristics. This seed is generations from the original importations; therefore, to comply with regulations the words "Variety Unknown" are included in this description. But these words won't have any effect on the big number of Hoffman customers who come back year in and year out for seed they know makes them good crops of valuable feed.

Sowing Oats with Canada Peas Makes Fine Early Green Feed. (Read details on page 44.)



HOFFMAN ``RED CLOVER''

All sources do not agree on the size of this year's supply of red clover seed. Some sections certainly did not make near the normal quantity. As this is written, there seems to be seed.... It's quite different from the very serious picture on alfalfa and alsike clover seeds. Whether, when seeding season time has passed, everybody will have had enough red clover seed, time alone will tell. Export to other countries could seriously cut the supply left for home use.

On this point you can depend . . . that while Hoffman continues to offer red clover seed, it will be good dependable quality. The hope is to continue to offer red clover seed; it will be done to the limit of Hoffman ability. The host of folks depending on Hoffman clovers through many years know they will get clean seed, sound seed of proper growth, seed free from foul weeds, and seed from sources that thrive for them.

Authorities everywhere are urging in this year of seed shortage, to do with smaller quantities per acre . . . and to help increase their soil's production with better seed beds and by adding lime and proper fertilizer. Hoffman agrees to these practices as sound, and certainly the thing to do. And urges everybody to inoculate all of his clover seed to give it just that much more of a lift toward better production.

Note: Mention is made on other pages about the growing use of Ladino clover seed, and the wonderful results it has been bringing. Don't overlook its possibilities . . . the very small portion of it necessary to sow shows up surprisingly.

When Is Hay Dry Enough to Bale?

Hay that is ready to go into the mow or stack may be baled in the field without danger.

Studies indicate that hay with moisture of 25 per cent or less may be baled in the field in 16-by-18inch bales containing not more than 8 pounds per cubic foot without danger of spoilage if stored immediately. Bales 36 inches long of this size weigh 45 to 50 pounds and are rather loosely compressed. Folks can judge this moisture content, as it is the condition at which they commonly store loose hay.

FARM FACT: Even when young, weeds are not innocent; they are soil robbers.

Bees Boost Seed Yields

Penn State men found 50 seeds per head of red clover where bees were caged within a clover patch . . . 30 seeds per head in nearby fields where bees worked . . . and less than 1 seed per head where bees were kept away from the blossoms.

Uncle Sam urges every bee-man to "save every ounce of beeswax." Needed badly for sealing shells, waterproofing coils, waxing cables, improving insulation.

Starting with bees? You might read "A Living From BEES," by F. C. Pellett. (Orange Judd Publishing Co., 15 E. 26th St., N. Y. \$2.00.)

Right Time to Seed?

Clover, alfalfa, or triple-purpose mixture can be sown on winter grain . . . when surface is loose, following several freezes. Sowing on honeycomb ground, or even on light snow, has proved good. February seeding was about as effective as March seeding. Surprising, but freezing has not seemed to injure seeds, small seedlings or the inoculating bacteria of legumes.

Some split their seedings. Sow half their seed when the earlier of the above conditions is favorable balance some weeks later under another set of February conditions. The two seedings at right angles to each other, to get better coverage. Second seeding can sometimes be done with alfalfa drill or grain drill.

Boost Forage Yields

Use of phosphate is most important means of stepping up production without increasing acreage. . . . Liming, manuring and protecting soil also help.

Increase Lamb Crop

By weaning lambs and giving ewes a rest before breeding season. Also some fresh pasture and a little grain.



"MAMMOTH (SAPLING) CLOVER"

Called by either name . . . mammoth or sapling. It is the taller-growing type of red clover. One which might well find wider use this year, when so many other clovers are so short in supply.

Mammoth clover makes heavier stems, taller —grows on poorer soils, even sandy to acid types, than does the regular red clover. Ripens maybe ten days later, but produces a plenteous supply of hay on its one crop.

This look at the 1941 crop report by Pennsylvania Experiment Station may interest you. First-cutting yields were 4,637 and 4,439 pounds as compared to the highest red clover yields of 3,894 and 3,686. The second cuttings 1,589 and 1,523 versus 2,165 pounds each of the best red clovers. First cutting the following season, same mammoth plantings, made 2,507 and 1,601 pounds compared to 1,984 and 1,745 from the two best red clovers. This does show merit, worthy of consideration now, when alsike and alfalfa are not around. Or to maybe partially replace red clover.

Same as with Hoffman red clover, Hoffman mammoth seed is of good high quality. You will find it strictly dependable in every way. Plants of mammoth clover live three years on the average against red clover's usual two. Good root system—fine soil improver. Blooms about same time as timothy, and suitable for combination timothy-mammoth clover hay.

HOFFMAN ``ALSIKE''

One of the shortest crops on record. Nobody disputes that fact. It will mean many seeding changes. Each man must decide on his plan. If there is only 35% as much seed as required, new seeding practices must be followed.

Suggestions: Cut down the quantity of alsike seed in your formulas. Where necessary, substitute an extra quantity of red or mammoth clover seed, while it remains available. Use of more timothy will help out. A little Ladino clover will often work wonders. Where you decide to sow three pounds less of alsike, put in say a half-pound of Ladino—results will surprise.

Please don't order your usual proportion of alsike seed.... Decrease it, increase red clover. This will help the other fellow.

"MIDLAND" ... "CUMBERLAND"

The new types of red clover. Both bred for high resistance to "stem-spot" disease. Midland for northern areas and higher altitudes. Cumberland for other localities. Supply almost unobtainable. If in stock, will be quoted on price list.



THE TWO POPULAR HOFFMAN HAY MIXTURES

Just how long either can be maintained in this seed shortage is not known. Alsike being in both and alsike seed being so very short in supply. But here are the facts about these seeds —while they last.

"ECONOMICAL MIXTURE"

(About ¹/₂ red clover, ¹/₄ alsike, ¹/₄ timothy.) Very popular. Pleasing a great number of Hoffman patrons through many years. Proportions may vary slightly, sometimes a little alfalfa, sweet or other clovers may be present . . . but general average approximates the listing printed above. The blend is made up of lots ofttimes harvested in the mixed condition—hence the lower cost. Quality is good—free from noxious weeds—and of high germination test.

``ALSIKE AND TIMOTHY''

This blend of seed usually averages around the 20% mark of alsike clover. Could overrun that percentage at times and this year may be a little under. . . . At all times this offering represents good quality seed . . . and a saving in cost compared to what the separate lots would cost unmixed. One fine point is the ability of both these seeds to do so well together. Both thrive on poorer soils, and are ideal partners in lower or moist locations. Ripen together. Of course they both do very well on good ground. This offering will help many folks in revising their customary formulas. It adds a little alsike that may be impossible to get any other way.

WHITE DUTCH CLOVER

Another item very short in supply this year. Its merits are known by all. Low-growing, spreading, withstands trampling, high in protein. Advisable in pastures, thrives with the grasses. **FARM FACT:** Wooden dollars money from judicious sales from farm woodlands—are just as good as any man's money.

Lime . . . and More Lime

So many soils never get the lime they really need. When a soil analysis report calls for heavy liming—apply it, in ONE HEAVY dose. That's better than several light shots. Some folks put two tons to the acre, because it pays them! They get crops! One or $1\frac{1}{2}$ tons certainly helps. But it's got to be put on, or it won't help. And it should always be worked down thoroughly and deep.

FARM FACT: As with life, so with livestock . . . you get out of it about what you put into it.

Cut Legume Hay—Fine Poultry Feed

Cut fine with ensilage or straw cutter. Leave short stems, less than 3 or 4 inches best. Feed on the floor. Leaves and fine stems are eaten. Coarser stems help build the litter. Floor feeding keeps fowls scratching and the litter spongy and loose. Loose litter helps keep houses dry. Well-cured legume hays are higher in protein than many chicken mashes. Rich in vitamins, too—especially A, B and C.

Topsoil . . . the Farm's Gold

Most valuable thing on the farm save it! Leave the natural way terways in grass . . . avoid ditches Keep protection strips plenty wide . . . irregular edges help. . . . Plant winter cover crops every time possible. . . . Keep your topsoil!

Make Hay at the Right Time

One thousand six hundred twenty-eight pounds of alfalfa cut in the bud stage produced as many pounds gain on cattle as 3,910 pounds cut when dead ripe. Cut alfalfa when buds nearest base of plant have just started. Maybe you won't get as much hay, but the quality is more important than quantity. Cutting at this time will give more actual FEED. Just one thing to be careful of. Let one crop reach full bloom stage before cutting to prolong the life of your stand. stand.

stand. Timothy should be cut in full bloom stage. At this time, it can yield 20 per cent more DIGEST-IBLE dry matter and 50 per cent more protein per acre than cut when seed is ripe. Cutting in the early bloom stage gives less feed-ing value per acre than cutting right at full bloom. Red clover will give the highest yield of protein and the highest feed value if cut when one-third to full bloom. Mammoth should also be cut at this stage, but alsike is at its best feed value when cut later, as the brown seed heads be-gin to appear.

gin to appear.

Sweet Clover Insures Humus

An Indiana man uses sweet clover an indiana man uses sweet clover as his main soil-improving crop. Says it offers no temptation to re-move it for sale. Plowing the green growth down helps much in re-placing fertility removed by his corn crop.

FARM FACT: In the dictionary of successful farming, soil-building is the biggest word.



WHITE DUTCH CLOVER'' (Continued)

Favorite with bee-men. There may be special lots at times which contain some alsike clover. These may prove helpful this spring. If in stock will be quoted on price list.

HOFFMAN ``TIMOTHY SEED''

Fortunately, there is timothy seed for everybody this spring. Reasonably priced, too. Far-reaching in its uses. Will help out on any new seeding programs—new formulas folks must adopt this time. Dependable for any section. Good on good ground. Thin soils, too. Damp locations. Starts easily. Thrives through hard times that often ruin other plants.

Timothy goes along very well with the legume family . . . the clovers, alfalfa, Ladino. Thrives in with the pasture-grass family. Will certainly help out to a great degree in this year of extreme seed shortages. . . . There is danger of too much timothy being put with some seedings, that overcrowding may occur. Caution should be followed.

Thousands of Hoffman patrons through forty years know the high quality of Farmer's Choice brand timothy seed. Its purity tests have always averaged right around the 993/4% mark. Germination has always been of the best. It is always free from noxious weeds. Hardy and dependable. Put full confidence in the satisfaction you will get from this truly top-quality seed. It will come through in fine shape and play a big part in tiding you through this present seed emergency.

HOFFMAN ``SWEET CLOVERS''

This might well be a year when more sweet clover seed will be sown here in the East. . . . Consider the possibilities of this good legume. Its most popular rôle hereabouts is that of soil improvement. Thrives on most any soil type. Can be put into use as emergency hay. And if taken in time for that purpose, before getting too heavy in stem, has filled that rôle acceptably. Be sure to apply Hoffman Inoculant to your sweet clover seed—it will pay you well!

``TALL-GROWING TYPE''

The biennial strain lasts two years. Planted in the spring, makes good growth by fall. Will reseed itself if left standing. Provides emergency pasture till other grazing areas are ready.

"YELLOW-BLOSSOM TYPE"

Like the white-blossom strains, this yellowblossom type is a perennial. Smaller top growth -2 to 3 feet the first year, higher the second. Fine stems, many prefer it as hay or for pasture.

When There Is No Alfalfa Seed, What?

As this is written, it is clear that the supply of alfalfa seed is very, very small. Throughout all northern areas that normally make some seed, there was a widespread almost seed-crop failure. Nothing like it ever happened before.

Same as our fighting men are facing new situations the world over, and overcoming them, so must we farmers here at home handle this one. ... How? In different ways. Please read some alternate plans listed on pages 4 and 5.

Here's one thing that should and could help. When a man is fortunate enough to get some alfalfa seed, he might reduce the quantity per acre—thus give the "other fellow" a chance to have a little, too. Nor would he suffer. Authorities of several states urge smaller seeding rates ... 6 or 8 pounds instead of 10 to 15. But get soils and seed beds into better shape by liming, fertilizing, better working the ground.

INSTEAD OF ALFALFA — SOW LADINO HERE'S WHY AND HOW...

Ladino will certainly help solve this alfalfa seed problem—please read pages 4, 7, 41. Makes fine protein hay, several crops of it. Resists disease that often injures alfalfa. Makes rich pasture. Will take over splendidly in northern and central areas.

Here are good formulas for use of Ladino: orchard grass, 5 lbs.; meadow fescue, 4 lbs.; red clover, 4 lbs.; timothy, 4 lbs.; Ladino, 1 lb. Where conditions are poor or wet, add (if available) 3 lbs. alsike, or increase the timothy, 2 or 3 lbs. For seeding in spring or late summer without a small-grain nurse crop, add 5 lbs. rye grass. Where the crop is to be kept more than 3 years, add 6 lbs. Kentucky blue grass and 1 lb. white Dutch clover.

Hoffman urges the use of Ladino this year instead of alfalfa. Ladino has come up fast—does a great job—will be used a lot more, and very successfully. Proper management, careful fertilization and quality Hoffman seed to start it . . . bespeak fine success—and the way out of alfalfa seed troubles this year.



FARM FACT: Alfalfa in the fall should do nothing but eat and grow fat. Late fall grazing, or cutting too late for hay may result in winter killing.

Bare Spots in Alfalfa?

Cover them with the following mixture figured on a per acre basis: 6 pounds of timothy, 4 pounds of red clover and 2 pounds of alsike on the thin spots. In some cases this can be increased to a little heavier seeding on an acre basis. This is particularly true if the total amount of thin spots in entire field is not much in actual acreage.

Manure these thin spots, apply fertilizer on the basis of 300 to 350 pounds of 3-12-6 or 4-12-4. It would probably not be advantageous to lime. Undoubtedly lime was applied at the time of seeding.

Buys Less Dairy Feed

A Rhode Island farmer stated that "an acre of good pasture can replace 700 pounds of 20 per cent mixed dairy feed—and the cow does the harvesting for nothing."

Orchards in Sod

Lime, fertilizer, and good management of permanent sods of Ladino Clover and other legumes and grasses improve tree growth and fruit quality by holding and building the soil.

Alfalfa Needs Lime

Unless soil is fairly sweet, don't try to grow alfalfa. If any doubt, samples of soil, not over 4 inches deep, should be taken from several parts of field, mixed together and sent to your County Agent for test. He will report whether lime is needed and the amount. If impractical to apply enough lime to sweeten soil thoroughly, it is safer to rely upon red or alsike clover.

Cool Milk Quickly

Dairy specialists advise cooling milk immediately after milking, to temperatures below 50 degrees Fahrenheit, as quickly as possible.

If Alfalfa Turns Yellow

An application of about 20 pounds of borax per acre may help right things.

Garden Preparation

Soil should be well prepared for the garden. Fall-plow a heavy sod or heavy coat of strawy manure. The coarse organic matter decomposes, and is more readily available for early crops than if turned under in the spring. Fall-plowed ground left in the "rough" over winter dries out earlier and spring planting starts sooner.

New Haying Idea

Cut alfalfa and other hay and forage crops around 5 or 6 o'clock in the afternoon, instead of in the morning . . . and you'll be storing up extra sugar and starch for your livestock. . . Some New York State scientists are making further research—but already have definite information along this line.

HOFFMAN "APPROVED OKLAHOMA" ALFALFA

Some years ago, Hoffman first sold this seed. Actual results have recently been checked into, and found very gratifying. There are still good stands of it on the farms of many Hoffman customers, producing well. This Approved Oklahoma is certainly recommended for most all Pennsylvania, New Jersey, except the most exposed upland areas. Why not? When Federal funds are paid to farmers way up in the North— Minnesota and Wisconsin—for planting Approved Oklahoma seed on their places? Estimates showed that farms throughout the state of Ohio have sown a very heavy percentage of Oklahoma alfalfa for many years. Here is good, clean, sound-growing seed ... as long as supply lasts, will be quoted on price list.

HOW ABOUT DOUBTFUL SEED?

Such seed is available—from Argentina, South America. Certain Government officials recently "let the bars down" to permit sale of that seed anywhere. Hoffman certainly does not recommend its use. One state authority said Argentine seed had produced no worth-while stands. Another reported that only one lot in seven tried, showed any profitable growth after the first year, and urged that its use be discouraged in the interest of good farming. Down in its homeland, it never has to stand temperatures above those equal to Washington, D. C., and would not have a chance to develop the vigor and stamina required in Hoffman territory. Some folks will buy this seed, take the chance, and although not recommended here, it will likely be listed on Hoffman price lists for those who want it . . . others may choose to blend this seed with their other to help stretch out their seed supply.



Hoffman Spring Grains to Aid Feed Supplies

WISCONSIN 38'' (VELVET) BARLEY

For feeding schedules, barley is similar to corn in value. And for a heavy grain yield, we recommend this tried-and-true variety. "Wisconsin 38" grows smooth beards—without the sharp barbs. The six-row type—very resistant to the stripe disease which badly injures some barleys. The best yielding strain of its type. Most popular spring barley on a very wide area. Grain matures early. Straw is of good length. As a nurse crop, the quick-growing characteristics of this straw assure full support of alfalfa or Canada peas, or other plants growing with it, plus the benefit of all possible moisture.

"ALPHA"—"SPARTON" (2-Row Types)

ALPHA: Popular 2-row spring barley throughout New York State and northern areas . . . developed at New York Experiment Station. Good yielding . . . firm straw . . . nice grain. Hardy. SPARTON: Good-yielding, bearded variety developed in Michigan. Well adapted also for Northern Pennsylvania. Medium maturity.

``SPRING WHEAT''

"Marquis" type. Good for flour. Early, and not often subject to rust and disease. Smaller grain than winter wheat. Sown mostly in higher altitudes of Pennsylvania.

Wheat for Hay?

Early-cut wheat (earlier than the dough stage) makes hay with quite a content of protein. Cut when heads are just emerging, saves the green color in curing and you may have as much as 10 per cent protein. If short of protein, here's something to consider.

Legumes Help Grasses

Increase protein content of grasses by growing legumes with them? Illinois researchers grew lespedeza and clovers in a permanent bluegrass sod. They found the protein content of the blue grass without the legumes 180 pounds per ton . . . compared to 240 pounds when grown with legumes, mainly lespedeza. Then the protein of the legume hay was additional value.

Lambs Need Grain to Finish for Market

Small feedings of grain daily . . . maybe ½ pound of mixed corn and oats . . . will pay good dividends when selling. Lambs should weigh 80 to 90 pounds. If not formerly treated for internal parasites, they should be given a phenothiazine drench 4 to 6 weeks before going to market. Grain is too precious to feed to those pests.

FARM FACT: A pretty stream through the farm adds usefulness to beauty when it is harnessed to a little power plant.

Power Sprayers to Fight Fires

Good idea to keep in readiness with water and gas in the tanks. About one-tenth the water is required with a fog nozzle. Fine mist absorbs heat of fire—-keeps out the air—cools it off—acts as blanket to smother the flames.

Barnyard Manure to Improve Pastures

Hundreds of acres of old permanent pastures now producing poorly, could nearly double in their production—by manuring. Good practice would be to put barnyard manure to about a fourth of the old pasture each year. Stock won't graze on that part until the manure has disintegrated. This gives the grass a chance to come along. One recommendation is about 6 tons per acre. Excess straw could be raked off with a hay rake after drying.

Turkeys and Buckwheat

Buckwheat is one of the best grains for short-time pasture and forage-crops for turkeys that nature has provided. Where it ripens early, turkeys can range the field, pick grains from the stalks. One hundred turkeys will harvest about two acres common buckwheat from late September to middle of November.

Late Pasture for Hogs

Rape may not be as rich in nutrients as alfalfa, but it has several advantages as a pasture crop for hogs. Can be grazed until it is frozen hard, and lasts until late November. It is an annual, and can be seeded for pasture where hogs are shifted from field to field to keep them on clean ground.

Rat Control

First rat-proof the premises. Follow by poisoning, gassing or trapping the strays. Keep the livestock's feed away from them. They can readily waste a ton a year if not properly guarded.

Chemical Research (USDA) has developed a process for recovery of rubber from kok-saghyz (Russian Daisy), now grown in United States. Below, a scene in a Philadelphia plant, showing the dried kok-saghyz roots being started on their way to conversion into commercial rubber.

``SPELTZ''

Speltz grows on poor land. Resists drought, smut, rust. Not readily damaged by rain. Adaptable to wide range of soil and climate. Fed to cows, horses, cattle, hogs. Often mixed with bran shorts. Ripens medium early.

``SPRING RYE''

A grain-producing rye not as tall or plump as winter rye. Sow early. Handle about like oats. Good for spring pasture, soiling purposes. Supply very short.

SOW "BUCKWHEAT"

Here is a grain-crop to help out in any feed shortage. Buckwheat also makes good flour. The middlings have high protein content.

You don't need to plow for buckwheat. Just run your disc over the land and seed—1 bushel to the acre. Yield in grain and straw is heavy even on thin soils. Buckwheat will do very well on fallow land. Seeding may be done all of June and first half of July, so it makes a good standby for other fields in case a bad spring ruins earlier seedings.

While some folks use buckwheat to choke out weeds and grass, it now has a bigger job in adding extra bushels of feed. It can be used, for instance, in Southeastern areas to follow an early maturing crop. Or in a worn-out hay field after cutting or spring grazing, develop a grain crop and still leave time to sow a late fall crop . . . bees like the blossoms.

To tame wild land—idle ground—sow buckwheat. Applying 200 pounds superphosphate steps up yield to maybe 5 to 8 bushels. It's a quick sure crop for most any emergency.

"CERESAN" (DUST TREATMENT) FOR OATS, BARLEY, WHEAT

Seed doesn't have to be smutty to need this new, improved "Ceresan." Extensive tests have proved that "Ceresan" treatment increases yield even where there is no sign of smut. In 65 tests with oats, over a three-year period, yield from "Ceresan" treated seed increased 18 bushels for every 100. Barley and wheat yields increased 6 bushels for every 100—a big return when the "Ceresan" costs but a couple cents a bushel.

With an effective treatment available at such a cost, it just doesn't pay to gamble with losses through stripe and seeding blight, covered or black loose smut, or seed rotting by soil fungus.

Use it on your oats, wheat and barley seed 24 hours BEFORE planting— $\frac{1}{2}$ ounce of dust per bushel of seed. Postpaid prices:

4 ozs., \$0.35; 1 lb., \$0.80; 5 lbs., \$3.40.



Hoffman Soy Beans

In the farm feeding program, soy beans fit well. Soy bean hay is equal to clover or alfalfa hay in feed value when cut at the proper time. The beans have a high protein content up to 36%. The meal makes an excellent base for mash. Soy beans may also be fed as pasture or hay, or in with the silage. Combined with oats, sudan grass, millet or sorghum, offers a wide variety of nutritious feeds.

Soy beans will grow anywhere—even on poor land. Properly inoculated beans on poor land will build a high nitrogen content into the soil for following crops. Important! Soy beans on sloping ground should be planted on the contour to prevent any soil washing.

BUT—don't plant your beans too early. Await warm soil. Avoid poor stands and weed trouble.

Naturally, in such an important crop, you want the best seed you can get. Here is good, reliable seed well cleaned, free of foreign matter. Order your soy beans and inoculant to come with your early planting seeds. Be ready.

WILSON'' (BLACK) TYPE SOY BEANS

The most popular hay-type bean of the East. Early enough to mature beans in lower Pennsylvania, Ohio, New Jersey and southward. Up to about 30 bushels of beans per acre in good seasons. Produces a great growth of slender stems, sometimes 5 feet tall on good ground. Three to 4 feet even on poor ground. Often yields 2 to 4 tons of high-protein hay per acre. Its rich growth also makes it an excellent pasture

For Quick Hay . . . Soy Beans

Where clover, alfalfa or other legume hay is short, soy beans provide an excellent substitute. Soy bean hay contains 14 to 16 per cent crude protein, compared to about 15 per cent in alfalfa, and about 13 per cent in clover hay. Feeding experiments have shown soy bean hay equal to alfalfa for dairy cattle. Sheep relish it and thrive on it. From average soils $1\frac{1}{2}$ to $2\frac{1}{2}$ tons of good hay per acre may be expected—depending on the season and fertility level.

Cover-Crop Value

When turned under as green manure, a cover crop (1) improves the structure of the soil; (2) adds organic matter; (3) makes soil more absorbent; (4) forms organic acids that help liberate mineral plant food.

Feed Insurance-1946

Would this fit in? Plan a soy bean acreage this year. To save the hay —baled or ground—to use next year when alfalfa hay will be short. It would supply good protein feed.

Raising Colts?

During the summer when colts are yearlings, and good pasture is available, no grain or hay may be needed. Where pastures are not first-class, some grain is necessary. Four parts oats, 1 bran, by weight —fed at about 1 pound per 100 pounds of live weight. If the colts need a little fattening, an ear or two of corn might be added to this ration. Thriftiness and good growth of frame in a colt depend a lot on his feed the first two years.

New Soy Bean Idea

To plant soy beans around the field, instead of doubling back and forth across the field. Makes for faster harvesting. Fewer cross rows to bump over with a combine. Saves machinery wear and tear.

Old Alfalfa and a "Good Doctor"

If the alfalfa was limed when planted, or after it was planted, it may not be necessary to add lime. But it might too. . . . Have the soil tested and see. But it should certainly be fertilized. Best combination would be manure and superphosphate, with at least 50 pounds of superphosphate to the load. Or use an alternate, or even in addition, 400 to 500 pounds of 4-12-4 or 3-12-6.

Soys Need Inoculant

If soy bean leaves looked yellowishgreen last year, it might have been a sign that not enough inoculation was used. Remember to inoculate soys this time.

Emergency Pig Pasture

How about fencing off a part of the soy beans that were planted for hay? Hogs relish the palatable grazing afforded by soy bean pasture.

Feeding the Extra "Colostrum"?

The milk secreted by the cow within 3 or 4 days after calving contains 40 times as much vitamin A as normal milk. Helps give the young calf certain protective immunity against disease. Has desirable laxative effect. Since most fresh dairy cows yield more colostrum than their infants can consume—some folks suggested that the excess be added to the milk given older calves.

Lespedeza Held Water

In 1940 in an Adams County, Pa., peach orchard, 1.68 inches of rain fell in about 30 minutes. Observations next day showed that in a clean, cultivated portion the water had penetrated only 2 inches, and severe soil loss had occurred. Under a crop of Korean lespedeza a few feet away, the rain had filled the soil to a depth of 14 inches and no erosion was found.

Soy-Sorghum Silage

A big dairy in New Jersey puts up a lot of soy bean-sorghum silage to boost the winter roughage supply. ... They use 15 to 25 pounds cane sorghum seed with 5 to 6 pecks soys per acre. Makes good silage without a preservative. Yields run good and heavy.

Beans must be of good germination . . . and the way to KNOW is to test the seed. Hoffman Soy Beans (and all other seeds) are proved for sound growth.

WILSON" SOY BEANS (Continued)

type. To plant soy beans in your corn, this variety is often used. Incidentally, the nitrogen produced by inoculated soy bean seed helps the corn and the resulting ensilage is high in food value. Mature beans in about 115 days.

"KINGWA" (BLACK) TYPE SOY BEANS

A fine helper any year when a lot of emergency hay may be required. Tests at Pennsylvania State College show Kingwa an excellent hay bean. Leafy and finer stemmed than many types. Not hard to cure. Produce good weight dry hay.

"MANCHU" TYPE SOY BEANS

The mostly used yellow bean—well suited for growing beans, for meal and oil production. Produces great quantities of medium-sized beans which mature in about 110 days. Beans stay in the pods nicely till threshed—a valuable point in dry fall. While Manchu's chief value is for bean production—sometimes reaches 28 to 35 bushels per acre—its erect and bushy plant can be used to good advantage for forage and for hogging down. Won't make as good or as much hay as above black types.

``CHIEF'' SOY BEANS

An excellent variety to grow for grain, where season permits—about 120 days. Heavy yielder of beans. Stiff straw. Stands well until cut or combined. Beans well-enclosed, do not shatter.

``SENECA'' SOY BEANS

Earlier hay type for the North-Central areas. Fine for hay in sections that will let it come to full-pod stage by late August. Thus preferred to the later hay types. Produces yellow beans. A good kind to harvest early, in time to follow with winter wheat.

``CAYUGA'' SOY BEANS

Black bean type. Best suited for short-season areas. Matures in some sections of New York. All right for early wanted hay, but makes less of it. If in stock, see price list.

``LINCOLN'' SOY BEANS

Newer yellow type. Medium full season. Strictly grain or bean variety. Gained quick popularity in Central West. Heavy yielder.

"EDIBLE SOY BEANS"

Plant some of the seed in your garden. A pound goes far. Plant 1" to 2" apart, rows 28" apart. Mighty good to eat . . . green, or often dried. Nutritious, too. This early "Bansei" is a good type.



"I wish to express my appreciation to you for geod corn for gurnageing all others I have WISh to express my appreciation to you I seed corn far surpassing all others I have formerly reised Hoffer the S This is my first experience of raising Funk's Hubrid Corn and it aure will not be my This is my first experience of raising funk's Hybrid Corn and it sure will not be my last, because its wield was beyond my expectations Hybrid Corn and it sure will not be my last, because its yield was beyond my ear, some more Most every stalk has one large ear. because its yield was beyond my expectations. Most every stalk has one large ear, some more I plunted 45 pounds of seed on " expect to exceed 1000 husbels." formerly raised. expect to exceed 1000 bushels." C. B. Harrison Oneida, New York. Hoffman Zuality Seeds Hel

nan Zunk & Hybrid eed for the Man Who Wants * * More Corn!



As this is being written, letters arrive in every mail with enthusiastic reports on last fall's Funk G Hybrid harvest. They are coming from men like Mr. Harrison (letter and picture, left), who planted his G number for the first time. They are coming from men who have been relying on G Hybrids for the past five years. They tell of records on 5-acre fields—and on 100-acre plantings. And again they furnish overwhelming proof that Hoffman Funk G is the Hybrid for the man who wants more corn. Again they emphasize the outstanding qualities that are so vital to yield for both crib and silo. What are these qualities? Read them ... and remember that these are the same outstanding G qualities corn growers were talking about, two—five—eight years ago. They are characteristics definitely bred into Funk G Hybrids:

GREAT, DEEP ROOT SYSTEMS WIDE LEAVES AND PLENTY OF THEM STRONG STALKS THAT STAND STRAIGHT TO HARVEST DISEASE RESISTANCE A GOOD EAR TO PRACTICALLY EVERY STALK SHORT-SHANKED EARS, EASIER TO HUSK SAFE AND UNIFORM MATURITY LONG KERNELS ON THIN COBS MORE AND BETTER SILAGE

Yes, truly, Hoffman's Funk G Hybrid is the seed for the man who wants more corn! Plant it this year!

p Good Farming Pay Better



In my 5 years' planting Funk G-12, I never found any other hybrids as productive. Have 36 acres; expect 4,000 bushels. Had severe storms—not one G-12 stalk blew over. It has a very heavy root system. —George F. Otto, Butler Co., Pa.

I planted ³/₈ bushel Funk G-12 on 2¹/₄ acres. Husked 400 bushels ears. Best yield ever produced in this area.—J. P. Coberly, Randolph Co., W. Va.

* The Early Butler hybrid is really wonderful—best I ever planted. Maturity is satisfactory and I think it will make over 100 bushels to the acre. (Round kernels were used.)—Walter J. Henny, Clarion Co., Pa.

> * I have grown Funk G-12 for husking 5 years—find it satisfactory in every way. (He uses round kernels.)— Geo. Bauer, Onondaga Co., N. Y.

* I really like the round kernels the best. It sure was good seed and produced a grand crop. It stood up all right through all the winds. Had good ensilage with your Funk G-94.—A. L. Lopus, Erie Co., Pa. * Funk G-94 always did good for me. Had a good crop in spite of a dry summer.—Thos. P. D. Borden, Gloucester Co., N. J. (He used round kernels.)

Have planted Funk "G" hybrids 3 years; have more corn this year than ever.—Steele Sparr, Blair Co., Pa.

* I had 4 bu. Funk G-94 large rounds; it did very well. Very good yielder of grain and fodder. Funk "G" are the most profitable hybrids we ever planted.—Fred N. Luf, Fairfield Co., Conn.

Our G-114 took the eye of many people; had many compliments that it was the best corn they saw all season. Planted it for several years. Consider it about right. Need 5 bu. for 1945.—D. W. Goodling, Juniata Co., Pa.

Several years ago I planted Sure Crop—it flattened out like a lawn. That cured me of openpollinated corn. This year we had severe winds; not one stalk of Funk G-114 went over. Anyone in this area planting G-114 will get corn, and satisfactory yields, too.—George Keil, Jr., Columbia Co., N. Y.

* Your Early Butler hybrid was very satisfactory; results the best of my 25 years. Many ears exceeded 1½ lbs. each. Fodder just right. Root structure excellent. (Another round kernel customer.) — Andrew Lindstrom, Clearfield Co., Pa.

> After two years' experiments, I prefer G-94 because of its standability, ear-dropping resistance (important for mechanical picking) and I like the ear and grain type. Use it for both grain and silage. Like plenty of grain in silage.—H. L. Stockslager, Washington Co., Md.

> * I planted Funk "G" large round hybrid. I think it is the best corn I ever raised.—L. D. Sonders, Marion Co., W. Va.

> > I am well pleased with the results of your "G" hybrid seed corn. Have been growing my own seed for 40 years, which has been very satisfactory, but your seed proved still better and I want more seed for next year.—Howard Brunges, Wyoming Co., Pa.

> > My Early Butler hybrid was splendid. Ears well filled to tips. Outyielded another hybrid of same maturity class which I grew past 5 years.—Clarence I. Johnson, Somerset Co., Pa.

> > Your Funk G-135 has been the talk of this community.—Zaitz & Sons, Mercer Co., N. J.

Better Ensilage, 700!

There's room here for only 33 users to report their happy experiences with Hoffman's Funk G Seed. . . Many thousands more are talking the same way. There is wonderful satisfaction . . . everywhere!

G-12 outyielded another hybrid we planted by a good 50 per cent to 75 per cent. Grew taller. Had heavier foliage. Even though taller, it stood up a good deal better in the hurricane this summer.—Kenneth L. Jeffery, Dutchess Co., N. Y.

G-114 was the best corn I ever used. It's the best fodder I ever fed. There isn't much waste after the cattle are through.— Clarence M. Fowler, Greene Co., Pa.

* The Funk G-12 RR planted June 1st to 3rd was ripe and cut Sept. 15th to 18th. Stood up fine. (He used round kernels.)— Martin H. Post, Morris Co., N. J.

* Funk G-12 has very nice fodder. Have grown it 3 years, and never any soft corn. Despite a very dry season this year, all solid corn. Had very nice silage with G-169 good, big fodder, well-eared. (Round kernels were used.)—Lee Johnson, Centre Co., Pa.

I'm surely pleased with G-12. It did extra well considering the weather. I like the tall fodder.—J. R. Pitsenberger, Pocahontas Co., W. Va.

The stand of Funk G-169 is excellent considering all the dry weather this summer. It is just about right for maturity and fodder. Planted 7 bu. and will need the same next year.—Joseph E. Duval, Bucks Co., Pa.

Taken one year with another, G-12 is hard to beat. Gets good fodder and ripe in good time. No soft corn. It's just right—suits me all around. I want more.—John F. Zook, Mifflin Co., Pa.

* I have good silage with G-218 hybrid. We had corn when no one else did. (Mr. Wahl uses round kernels.)— Philip F. Wahl, Sullivan Co., N. Y. * Your Funk G-94 is the best corn 1 ever had. Maturity quite satisfactory. Fodder is heavy. (He used round kernels.)—Edward W. Overton, New Haven Co., Conn.

Accept my order for 4 bu. Funk "G" corn. I have grown it for 3 years.—Franklin Fester, Columbia Co., Pa.

* In a community that prefers West Branch Sweepstakes, G-94 was the only corn anyone would change to. It stood up through high wind with rain much better. Was 75 per cent to 90 per cent better to handle. This was when the *hurricane* passed just east of us, but we got strong winds with rain. (Round kernels were used.) —Allan Kenderick, Franklin Co., Mass.

* We like your Funk G-218 for silage. Matured in time, ears well developed, stood up exceedingly well. The G-12 is real hard —we look for a good crop. We use round, kernels.—Harry Thurston, Bradford Co., Pa.

* The Funk G-12 large, round hybrid was far superior to any corn I ever raised. Maturity just right. Yield about 75 bu. per acre. Height 10 feet to 12 feet. Nice, thick fodder. Standability the best. I want 1 bu. —Chas. K. Reith, Onondaga Co., N. Y.

I prefer Funk G-135 for silo. Fodder is very tall. And G-94 I like as field corn.— James B. Runkles, Montgomery Co., Md.

I had your G-135 for silage—liked it very much. Grows very tall. Want the same kind.—Quinten F. Zwally, Lancaster Co., Pa.

* The results of the Funk G-94 round kernels were very satisfactory considering weather conditions. In getting corn, we see no difference between the rounds and flats. Please reserve the same for us the coming spring as you furnished last year.—John W. Fitz, Franklin Co., Pa.

* The Funk "G" Hybrid corn was very good. Give us the same Funk "G" regular rounds again.—John Piho, Windham Co., Conn.

* NOTE THIS Significant Fact: All those stars mean that the results were secured from round kernels. So these folks saved some money too!





Junk Breeding

Hoffman Selection

Here's the Key for the Man Who Wants More Corn

Funk G Hybrid successes—and the features that assure them—are not accidental. They are the result of hundreds of thousands of inbreedings, cross-matings, patient study of the foundation that will get more corn in any condition. And you'll find that foundation is the stalk quality, the root structure and the leafiness and disease resistance of a Funk G Hybrid plant. The yearafter-year breeding program to build these qualities into every Funk G Hybrid is the work of Dr. Jim Holbert (and his expert staff)—a man who studied corn over 25 years, learning about the factors it takes to get more corn—and is constantly improving his combinations to strengthen those features.

But even the best hybrid must be used under conditions for which it is bred and best suited. So the distributor of a successful hybrid must KNOW THESE FACTS! He must be thoroughly familiar with the soil, season, altitude, location and purpose of his customer. And he must know just which hybrid varieties will meet those conditions best. That's why the Hoffman customer has double reason to succeed with his recommended G Hybrid. For nine straight years Hoffman has maintained a gigantic Proving Ground Program to determine under actual growing conditions just what each G Hybrid will do. Read the picture story of this program on next page—realize that these facts are what makes Funk G Hybrids so universally successful in this area.

The three pictures show:

Top—Silks covered so they cannot get any contaminating pollen.

Center—Tassels covered so they cannot shed their pollen onto silks where not wanted.

Bottom—Dr. Jim Holbert (in charge of Funk G vast breeding program) inspecting two of his inbreds in a breeding nursery.







At harvest each G Hybrid is kept in separate piles to check exact results. The same hybrid is planted several places in plot to get the fair average.



Corn from each G Hybrid is counted, weighed, measured, and an accurate record kept. Records on some hybrids go back nine years.



Corn experts examine plants, ears, stand, etc., for characteristics that affect the yield. In addition to yield, the basic corn-getting qualities must be present, too. To secure an absolutely impartial check on actual corn yield, samples of each hybrid are collected for moisture testing back in the laboratory. Here, scientific equipment reduces moisture of each hybrid to same basis so exact comparisons can be made. The best looking ear may not always produce the best yield.

The records of each hybrid are kept and studied constantly. With this information "Les" Hug (left, Hoffman Hybrid Manager) and his assistants can tell exactly how each G Hybrid will perform under any set of conditions. Here's how you help yourself. When the Hoffman customer fills out this order blank, he is giving Hoffman a picture of his growing conditions. For both husking and silage corn, Hug and his men will select the G Hybrid that has PROVED itself best under those conditions.



SHIP TO at Place) Ship C. Q. D. when Convenient When I send Payment in Febru "G" Hybrids you want, mark their r Be sure to mark which Price Seed HOW TO SHIP WHEN TO SHIP (Check Which) Wanted tas Husking Husking 100 131 \bigcirc 6000 B MEDIUM \bigcirc FOOK. My carn version is 10.100 days $\frac{1}{2}$ (date) $\frac{5}{2}$ (2.6.5/20 Felt broots exact (date) $\frac{9}{2}$ (date) $\frac{9}{2}$ (date) SOIL TTPE BE LIMITET LI MINESTONE LI MINE U CURE I GROUND 13: LI GOOD BI MEDIUM LI POOR. My com vereau S/m The T/20 EN Low in for what I I I NO B Envertion above see laved 200 feet him Core Early a lave a lave and la NOTE: II stanting in If hav mate been verif satisfactory and low yield



Look at those broad leaves! And they're "youngsters"—only starting!



Stalks that stand like soldiers, through storms and wind till harvest.

See the difference between a Funk G Hybrid root system (left) and that of ordinary corn.

The Three Great Features of Every Junk G Hybrid

Consider every corn plant in your field as a corn manufacturer with three major departments and you'll see how proper breeding and selection do get Hoffman customers more corn.

THE POWER PLANT—The roots that gather moisture, minerals and other substances from the soil. All Funk G Hybrids have great root systems. Some are bred to get extra power out of thin soils —some to work well in rich loams.

THE MANUFACTURING DEPARTMENT — The leaves of the plant are the only parts that manufacture food necessary to grow corn. So long as they are green, they are still working. Note this outstanding characteristic of all Funk G Hybrids. They are the leafiest corn plants you ever see wide leaves, lots of them. And these leaves stay green (still working) all the way to maturity.

THE WAREHOUSE – The stalk is where the food is stored—to be fed to the plant when it is growing, to be fed to the ear when it is maturing, to keep the stalk erect and alive long after the ear is dry. The strong stalks of Funk G Hybrids have the capacity to store the extra power and food—and to feed it to the proper part at the right time. Ask the man who has gotten more corn from Funk G Hybrids. He'll tell you how outstanding these three features were in his corn field.



Read this story again! This Hybrid book sent Hoffman friends last fall tells the whole story about these successful G Hybrids. Read it again. If you mislaid your copy, ask for another. Give your friend's name, to whom a copy will also be gladly mailed.



Do You Want More Corn? Order Your G Hybrid Seed Now!

Remember, Funk "G" Hybrid Corn Seed is not like other seeds. There is just so much seed of each "G" number available. And when that's gone—well, further orders must just be returned. So please don't delay! You've watched the big Hoffman proving program in action. You've seen proof of the ability of "G" Hybrids to produce, witness hundreds of great letters from users of them. You've read the facts about why they produce so well. Now put them to work producing more corn for YOU!

IF YOU DON'T KNOW WHICH ``G''

If you have grown "G" Hybrids in the past you know which "G" number to order. If you haven't—you can rely on Hoffman's 9-year experience—showing just which "G" Hybrid will produce best under your conditions.

This is important! Just because a neighbor got results with a certain "G" number is no proof that it will be best for you. On the back of the Order Sheet mailed with this book are several questions. Just write your answers in the spaces provided, tell how much you want, and you'll get the right "G" Hybrid for you! Thousands of farmers gave Hoffman their first "G" Hybrid order in this same way, and they are writing constantly to report how very well the selection produced for them.

REMEMBER THIS!

Hoffman Funk "G" Silage Hybrids are specially bred and fitted to produce for you better, more nourishing silage. There are special husking "G" Hybrids for your needs—other special silage "G" Hybrids to suit your case. Be sure to tell just what you want your hybrid to do.

Don't use your last year hybrid corn for seed—it's NOT HYBRID any more. Won't make you as much corn—not by 15% to 25%! New Funk G Hybrid every time is the only way to real corn profits.

DIFFERENT SIZE SEED-KERNELS

Because of its extra-high breeding—ALL THE GRAINS on each "G" Hybrid ear have EQUAL VALUE FOR PLANTING! Grains toward the end of the ear, the middle grains, the round grains, the flat grains! It's been proved hundreds and hundreds of times. Each size of kernel will produce equal-quality crops!

A vast number of official experiments on file in Washington, D. C., prove there is no difference in the ability of round or flat kernels to produce a good crop.

Round kernels are not, necessarily, off the ends of the ear. Look at any ear. You'll find round kernels here and there on most any section of it.

With proper planter-plates for round kernels, accuracy of planting is just as perfect as for flat-kernel plates.

A tag on every bag of Funk "G" Hybrid tells what number plates fit that bag of seed. There actually is a saving in planting "Rounds" instead of "Flats."

If the kernel size you order is still unsold, you shall have it. If not, will it be satisfactory to furnish the kernel size of your proper "G" num-

ber still available? Be assured, your full interests will be safeguarded in every way. You want a good corn crop from this fine Funk "G" Hybrid seed . . . and Hoffman will follow every step to insure your getting it!

All Funk "G" Seed Comes to You Already Treated with Semesan Jr.

31



Hoffman Seed Corn (Open Pollinated Types)

For those who will still plant the regular oldtype, open pollinated corn . . . here is their seed. It is of sound germination, well graded. Processed by thorough Hoffman methods to insure successful stands.

To get full benefits from your corn acreage use the two seed treatments offered on page 35.

"LANCASTER COUNTY SURE CROP"

Since 1912, more of this corn has been planted than all other old-type corns combined. Not a show corn, but makes a large proportion of ears with well-glazed grain in the ensilage it produces.

Ears long and big, with yellow grains high in protein. Cobs thin, 12 to 16 rows. Grains are somewhat square and don't leave gaps between rows. About a bushel of corn to 66 to 68 pounds of ears. Stalks tall. Develops and matures medium early. It doesn't demand rich soil. "Lancaster Sure Crop" has produced crops where other corns failed. Dependable even well into the North.

"LONG'S CHAMPION YELLOW"

Too late for corn in Northern sections, but has turned in good crops in Southeastern Pennsylvania. Produces big ears with deep yellow grains. In Northern Pennsylvania and New England it's used for silage, producing tonnage topped only by the G Hybrids for silage developed for these sections. Don't plant it on poor soil. If fed well, on good soil it will perform all right.

WHITE CAP YELLOW DENT

Medium season corn for Southern Pennsylvania, New Jersey and Ohio (except in higher altitudes). A good yielder. Ears white, but sides show yellow. Ears compact, cob not too large, grains good size.

Corn as Chick Shade

One man ran 6 rows of corn along two sides of his summer range. The birds used the corn for shelter through hottest part of summer. His corn yield from these strips was same as his main crop corn. Pullets like shade spots where they can eat and drink in comfort.

Shred Fodder for Feeding

Many leading stockmen always do. They say cows eat more, and the refuse makes better absorbent for liquid manure, is easier to haul out and spread. . . In cattle barns where bedding and manure are allowed to build up, a dusting of 20 per cent superphosphate over the surface each week or 10 days in fall and winter will better the fertilizer value when applied to crop land.

More Hen Comfort—More Eggs

To kill lice and stop their multiplying on fowl's body . . . apply thin strip of nicotine sulphate to perches half hour before roosting time. Heat from fowls converts the liquid to a gas which penetrates feathers to kill lice. Ventilate to offset any effect of over-application of the drug. Repeating treatment in 10 days will get the next breed of lice.

Corn Suckers

Don't sucker corn. The old belief that suckers hurt has been proved wrong. And don't hill seed corn in garden—injury to roots often results.

Clean Fertilizer Cans

Why not clean them out immediately, every time? Putting the machine away—with these cans not cleaned out—leads to troubles of temper, speech, and the machinery itself.

Corn-Borer Control

Clean up the corn fodder and stalks. Best to disc it down in fall or early spring. Fodder should then be plowed under so not one part of it protrudes from the soil. It is in the stalk and cob that the corn borer lives during winter. If com-pletely covered by several inches soil, it is eliminated. Corn left in the crib should be put through the hammer mill, or immediately after shelling in the spring burn the cobs. cobs.

Set Bait Stations

To control meadow mice and pine mice in orchards—build the bait stations (early October) over run-ways of the mice. Later place the poison bait in them to kill the pests.

Corn-and-Cob Meal Helps Make Grass Silage

Good quality legume silage is pos-sible, in spite of wartime shortages of preservatives, molasses and phosphoric acid. Some good silage was made by adding 200 pounds of corn-and-cob meal to each ton of alfalfa as it was stored. Another means: Wilt alfalfa in the swath to a moisture content of around 60 per cent. This concen-trates the fermentable sugars in the cells of the plants sufficiently to result in a silage palatable to the cows, and which keeps well. Growing sorghums with legume crops and separately to be mixed with them when ensiled was also successful. Feeding tests indicate that 15 to 25 per cent of green sor-ghum forage mixed with alfalfa or soy beans makes good silage. soy beans makes good silage.

Corn Fodder for Green Feeding

Regular field corn "sowed" in rows (about a half bushel of seed per acre) should be ready for dry fod-der or green feed within six weeks of planting. When a shortage is in sight, this planting may be made as late as July 1 to furnish food by the middle of August. Sweet corn fodder, while it does not bulk, may be cut immediately after the corn is picked and fed early in the summer—cattle like it.

A Wasp Trap

One farm-paper writer advised making a fruit jar quarter-full of sweetened water, cut a half-inch hole in the top and hang to the ceiling. Says wasps fly in—but not out.

WEST BRANCH SWEEPSTAKES

Grows dependable fodder. It also fills cribs where the season is long enough. It will never take a prize—ears run all colors from red to yellow, but some dairymen like it for silage feed.

''IMPROVED LEAMING''

"Rough and ready" type. Good on poorer soils —also on well-drained, fertile land. Grain is rich yellow, good depth. Ear well filled. Red cob, medium size, 14 to 18 rows. Good fodder, numerous leaves, thick stalks, not extra tall.

"GOLDEN QUEEN"

Yellow corn, high feed value, sizable ears. Medium grain. Matures mid-season to late. Tall, well-leafed fodder, but won't mature in Northern counties

"EARLY YELLOW LEAMING"

Classed as early corn, adapted for higher locations. Small ears, small cobs with grains of good size coming low on stalk.

``EUREKA ENSILAGE''

Produces heavy tonnage. Sometimes up to 16 feet tall. Very late type. Too late for grain in the North. Seed scarce. Funk G Hybrids much more desirable.

``8-ROW YELLOW FLINT''

Still wanted by some where season is too short for the standard type corns. Eight rows of yellow grains on ears which run 9 to 11 inches long.

"REID'S YELLOW DENT"

Limited supply. Grows successfully from Southern Pennsylvania south, except in higher altitudes. Ears are compact, with a thin, red cob and deep yellow grains. Regular rows set closely.

"RED COB WHITE ENSILAGE"

Virginia-grown ensilage type that produces big tonnage. Stalks have short joints, numerous leaves. White corn on a red cob.

"EARLY CLARAGE"

Produces crops of good hard corn in medium Northern sections. Really dependable as an early variety. Ear is nice type, rich golden color.

WEARLY BUTLER''

A corn for Northern sections—short seasons. Ears aren't large, but you'll get a crop. Our seed is true strain of its type.

Hoffman Sweet Corn Good Eating for the Family

Note: Treat all sweet corn seed with "Semesan Jr.". . . to combat disease, better the stand, improve the crop.

Here is a supply of fine-quality seed....Favorite varieties. Hybrids and open-pollinated types. Tested, sound seed, and at right prices.

``STOWELL'S EVERGREEN''

The good old standby, main-crop variety. Fine, sugary, white grains. Good size ears, 16 or more rows. Most favorably known, and widely used.

"GOLDEN BANTAM"

Best known and best liked of all early yellow sweet corn. Outstanding 8-row type. Kernel wide, medium deep, quality excellent. Cob thin. Good grower.

"LINCOLN" (HYBRID)

Good mid-season type. Seven to 8-foot stalks. Ears 12 to 14 rows, 7 to 8 inches long. Broad, bright yellow kernels. Resists drought and wilt. Excellent table qualities. One user said his Lincoln seemed to resist ear-worms.

``IOANA'' (HYBRID)

Productive. Highly resistant to wilt. Tall plants. Broad leaves. Ears 7½ to 8 inches. 12-14 rows. Light yellow. Fine variety. Takes adverse conditions well. Has gained much wider use past few seasons. Splendid flavor.

(Two more fine varieties—next page)



Spread Manure Quickly

Manure does the most good when hauled and spread as quickly as it is made. That's why the manurespreader should be used every few days.

Tent Caterpillars

Many folks pick off egg masses in the fall to rid their trees of this pest. But early spring, when the nests are small and caterpillars still young, is the time to rid the premises. Burning is all right for single trees. But where burning is a hazard, spray with lead arsenate -2 large, level tablespoons to 1 gallon of water.

Chopping Fodder Kills Corn-Borers

Chop the fodder fine . . . it will work! Cutting the corn very low helps to remove the hibernating borers from the fields. Leave hardly any stubble if possible. Where using the stalks as feed or bedding, shred with cutters set as finely as possible to destroy all the borers. 1 inch lengths recommended.

Fire Prevention . . . ALWAYS

Inspect premises often. Keep lightning rods properly grounded. Replace inflammable wood shingles with fire-resistant roofing. Inspect electrical equipment. Keep cords in repair. . . Allow no frayed cords. Store gasoline safe distance from buildings—in metal containers. Allow no rubbish near barn. Destroy oily rags. Don't allow smoking in barn or near combustible materials.

Burning Stumps

In fall or early winter bore 1 or 2-inch hole in stump, depending on its size—and about 18 inches deep. Place one or two ounces salt peter in hole. Fill hole with water and plug it tight. Next spring take out plug, pour in about a gill of kerosene and light it. Stump will smoulder, without blazing, to its roots, and leave nothing but ashes.

FARM FACT: A grain-blower elevator operated by a 2-h.p. motor saves 3 to 4 men at threshing time on the owner's farm.

Checks Chickens Daily One leading poultryman goes through his houses each afternoon to scatter grain in the litter and watch for birds not eating. Trouble -usually disease. Removes them at once to avoid flock epidemics. ... He also says that crowding is a factor in rapid spread of layinghouse diseases.

Lime Litter

Liming the litter makes it stay dryer, and makes it a better plant food. Unslaked lime best to keep litter dry. But because of fire haz-ard must be mixed into litter thoroughly.

FARM FACT: There is more milk at less cost by the silo route.



Domestic production of beeswax should be stepped up, USDA authorities say. Melt up broken combs or combs not well fitted for honey storage or brood rearing. This will add to nation's needed supply of wax, and will force bees to produce more wax by replacing old combs with new ones.

"GOLDEN CROSS BANTAM" (HYBRID)

Keeps gaining many new users every year. Fine producer. Has made 25 to 40 per cent more whole-grain corn per acre than comparative regular corns. Good ear, 12-14 rows. Strong grower. Has yield, flavor, dependability. Recommended.

"EVERGREEN HYBRID"

Developed because of a demand for a good white hybrid carrying the good traits of regular evergreen types. Ears $7\frac{1}{2}$ to 8 inches, large cylindrical, straight rowed, many rows, well filled. Good husk cover. Appealing flavor.

``CROW REPELLENT''-**TO KEEP PULLING-BIRDS** AWAY FROM CORN

This "crop saver" has been successfully used for over 20 years. In terms of results, more effective and economical than any other material. Costs only 7 to 10 cents per acre—mighty cheap crop protection.

Not only does it protect the corn crop from crows, blackbirds, squirrels and other cornpulling pests, it also helps protect seed from rotting, means larger yields, saves cost of replanting. Easy to use, doesn't clog planter. Nonpoisonous—really keeps the pests away.

1-quart size—enough for 4 bu... \$1.75 1-pint size—enough for 2 bushels 1.00 $\frac{1}{2}$ -pint size—enough for 1 bushel .60

``SEMESAN JR.''-**TO INCREASE CORN YIELDS**— **BY OVERCOMING DISEASE**

Increase corn yield from 5 to 15 per cent! You've noticed how stunted some plants get—the result of attacks by fungi and molds, especially in cold, wet weather. New, improved "Semesan Jr." controls such diseases before they start. Checks root and stalk-rotting. Improves stands and yields. Safer early planting. Apply this powder to seed. Cost $1\frac{1}{2}$ to $2\frac{1}{2}$ cents per acre. Results in finest crop insurance. You need not order "Semesan Jr." for your Funk "G" Hybrid seed it has already been treated.

``CAHOON'' SEED SOWERS

These popular seeders often come in handy. Used by thousands. Speed up hand sowing of grass seeds and grains. Useful for rough, steep locations. Also in regular rotations. Accurate. Well built. Easily adjusted. Full directions. \$5.00.

Hoffman Seed Potatoes

Early prospects indicate a continuing heavy demand for good seed potatoes. From the sources that have always supplied Hoffman with good healthy true-variety seed comes the assurance of a fair-sized supply. There is no assurance that this will meet all demands. Foreign needs, as well as those of our own Armed Forces and home front, assure a market for good potatoes. So order this good seed early—and plant it in well-fertilized ground for a bumper crop.

"IRISH COBBLER" (CERTIFIED)

Of this old reliable, this page offers you extrafine Maine-grown seed. A fine, early, heavyyielding potato. Delicious, mealy. Shallow eyes. Stores well. Popular favorite. There still is no potato used on as many farms on as wide an area. The reason is the ability of this fine variety to make good yields of good potatoes.

MICHIGAN "RUSSET" (CERTIFIED)

A hardy grower, easy to harvest, good keeper, resistant to many diseases. The iron-clad rules of the Michigan State inspection service protect you when you buy this seed. This seed is produced by famous Tuber-Unit method that removes everything undesirable. Continues to produce heavy yields every year. Very dependable. Recommended.

"GREEN MOUNTAIN" (CERTIFIED)

Always among the best-liked standard varieties. A late variety. Good eating qualities—sound keeper. Keeps right up with the leaders in yield ability. Has many friends, and seems to keep them year after year.



Good Way to Learn

One progressive potato farmer always puts out some seed of a different variety than his main crop . . . to learn if there is something better than what he thinks is best.

Planting Tomatoes?

The less the time between pulling and transplanting—the more disease-free and better plants. Use of fertilizer, like 3-12-6 or 4-16-4, applied along the row, 2 to 3 inches from the plant, in addition to broadcast application, is recommended.

FARM FACT: Weeds as a cover crop may be inexpensive to grow, but they don't manufacture nitrogen as legume crops do.

Late Potato Blight

Spray early and late with Bordeaux mixture. That means early as soon as the rows can be seen, and at weekly intervals as long as the vines are alive. Bordeaux is 8 pounds bluestone, 8 pounds lime, hydrated or burned, and 100 gallons water.

Continuous, thorough spraying with Bordeaux insures grower against late blight and promises the best crop that conditions will allow.

Fertilizer for Potatoes

With manure and a good legume sod turned down, apply 600 to 800 pounds of a 4-10-10 or 4-12-12 or 160 to 200 pounds of plant food in a 1-2-2 ratio. Without manure, the 1-2-2 ratio furnishing 200 to 240 pounds of plant food such as 1000 pounds of plant food, such as 1,000 to 1,200 of 4-8-8, seems best. For early potatoes the total plant food might be increased to 240 or 260 pounds, using the 1-2-2 or a 1-2-1 ratio, such as 1,200 to 1,500 pounds of a 4-10-5.

Hardware Disease Among Cattle

Just a little care will blot out this trouble entirely. Too many val-uable animals have been lost by it. See that metal scraps are always cleaned up after repairs, etc. . . . so the cattle just can't get hold of the nails, bolts, staples, wire, etc.

Kill Poison Ivy

At end of summer, this pest is weak enough to be knocked out with a dose of sodium chlorate. Spread about 3 pounds per square rod on the ivy patches on moist, cloudy day before ground freezes. If you can't get chlorate, try for ammonium sulfamate, or next, borax borax.

Watch out for poison ivy smoke when burning the plants. Don't walk through this smoke. The poi-son is often more active in volatile form than when growing.



``KATAHDIN'' (CERTIFIED)

A very mealy variety. Oval-shaped—very smooth—shallow eyes. Matures a little before "Green Mountain." Fine yielder. Vines dark green—thick, heavy foliage. Gaining in favor each year.

``SEBAGO'' (CERTIFIED)

One of the newer varieties from Maine; late and blight-resistant. If sprayed will continue to grow until the frost gets them, consequently a greater yield of fine-appearing tubers. Many reported that Sebago lived through the dry weather to make good crops after the late rains.

TREAT SEED POTATOES WITH "SEMESAN BEL" **2[¢] MORE PER BUSHEL**

You can't get good yields from disease-weakened plants. Even the best seed can be affected by some of these soil-borne diseases. "Semesan Bel" offers you easy, low-cost control of Rhizoctonia, scab, and other soil-borne diseases.

Results are remarkable. Practical applications show an average increase in yield over a period of years of about 10%. Yet it costs so little-2 cents per bushel, one pound treating 60 bushels. Simply quick-dip in solution and plant.

Don't let disease rob you of potato profits. Treat ALL seed, including certified.

THOUGHTS FOR THE TIMES

The Golden Rule is the best yardstick of farm-life values.

Even in wartime, better production at lower cost is more important than more production at any cost. To increase the size of a farm without buying

more land, clean up all waste places and idle corners. With trees more valuable now, why not increase present and future income from otherwise idle land? For forest tree seedlings at almost no cost, how about writing your State Forestry Department?

We may blame many things on the war, but we can blame only ourselves for sowing inferior seed. The least expensive way to learn something about farm progress—same as with any other business— is to keep accurate records.

Larger investment and higher operating costs on the farm must be met with larger yields and higher marketing efficiency.

Feeding high-value feeds to low-value livestock is walking on sinking sand.

A half day spent at the Better-Farming Demon-stration may be worth more than a week spent at hard work.

When farm operators add "and Sons" to the business name, they make it much easier to keep the boys on the farm. . . Give the son an interest in the place, and he will take an interest in it.



Pasture fills the milk pails. Good pastures, properly managed, can be the source of the cheapest dairy feed. Why not make yours so?

The continued shortage of good legume seeds, plus the urgent need for good pasturage, makes these pages important. Besides descriptions of good grasses are suggestions to help you get the most out of your pastures in milk-checks and livestock weight. . . . Study this information—it may save you dollars of seed cost and earn you many other dollars. Don't expect results without high-quality seeds. You can depend on Hoffman Seeds being clean and of full vigor.

"TO FRESHEN UP OLD PASTURE"

Sow 10 pounds rye grass and 2 pounds Ladino clover per acre. First lime and fertilize. Then broadcast on top, or better still, seed with a disc drill. Follow with cultipacker in either case. (Not for new pasture, or if old stand is completely gone. Not balanced for a good stand alone.)

"RED TOP" (HERD'S GRASS)

A very useful, medium height perennial grass, with a creeping habit of growth. Four main uses -(1) as wet or sour land crop, (2) for pasture mixtures under humid conditions, especially on soils other than limestone, (3) as soil binder to combat erosion, (4) for hay mixtures. Grows on lime-starved soils that won't support other grasses. Vigorous, drought-resisting, it makes a coarse, loose turf. Matures with timothy.

Well-Managed Pasture

One important thing is to get cows in there early and keep that grass down to less than 4-inch average. Soon as the grass gets too high too quick and too early in the spring, the cows can't handle it. Gets tall and pokes them in the eyes and they wander around tak-ing a bite here and there. While it is low and thick, they go slowly and progressively move their heads from side to side and take it all as it comes. it comes.

Applying manure in the middle of the winter when the ground is frozen is a very good way to get this pasture to perk up quickly in the spring.

Cutworm Poison Bait

Twenty pounds or so per acre. Scatter late afternoon or evening. Mix about 5 pounds bran with ¹/₄-pound Paris green. Dilute about a pint cheap molasses with a pint of water. Then mix all together. Add enough more water to make mix-ture crumbly moist. This poison-bran bait is also ef-fective against fall army worms.

Lots of Water for Cows

Clean, fresh water should be avail-able when they desire it. Large, good-producing cow may consume 150 to 300 pounds of water daily ... her consumption going up as the temperature advances. Shade is another requirement for summer cow pastures.

Hoffman Pasture Grasses

Pasture Improvement

Where no manure is used, the average recommendation in Pennsylvania and other states is 400 to 500 pounds of superphosphate. New York State recommends as high as 800 pounds per acre.

800 pounds per acre. It would be better to use as much as 400 pounds of 0-14-6 or 0-14-14. Potash brings on white clover quicker.

Ventilate Barns

To maintain healthy herds and produce milk with a clean flavor, many dairymen should improve ventilation in their barns and stables. Plans are available from county agricultural extension offices.

A Calf Well Started Is a Calf Half Grown

After weaning, 1½ quarts milk twice daily is enough for first week. Two quarts twice daily, the second-week menu. Large, thrifty Brown Swiss or Holsteins might get slightly larger meals. One authority said: "Start the calf on the dry starter at a week or 10 days old, and keep it before the calf at all times. If milk is increased, the calf will not go on the starter fast enough. When the calf is eating 4 or 5 pounds of starter daily, continue at this amount until 3 or 4 months old, and then change gradually to a good calf-growing or fitting grain mixture."

Pruning Fruit Trees

Pruning may start after leaf-fall nears completion.... Not too early. Apple and pear are hardiest, therefore earliest pruned. Plums and some cherries next. Peach and cherry are most tender—delay their pruning to after middle of February.

Good ranges for growing chickens and turkeys save feed, as grass contains many important nutrients. Green, succulent, tender grass is a good source of vitamin A, riboflavin, and other water-soluble vitamins. Furthermore, clover and blue grass ranges furnish protein, calcium and phosphorus. An analysis of 25% protein on a dry basis has been found in samples from good poultry pastures in Pennsylvania. . . For free leaflet, "Improving Poultry Ranges," write direct to Agricultural Extension Service, State College, Pa.

"KENTUCKY BLUE GRASS"

The leading pasture grass for good soils, and perhaps the hardiest of perennial grasses in most Eastern sections. Prefers sweet soil for top results, and responds quickly to applications of phosphate and lime. Rarely exceeds two feet. Sow 30 to 35 pounds per acre. A slow grower, therefore best sown with quicker-growing seeds. These take hold and are replaced by the Kentucky Blue to form a tough, permanent sod. Fine on sharp slopes and for our limestone valleys.

``FIRST-YEAR PASTURE''

For a pasture in your wheat field the same year you harvest the wheat: Heavy first-year pasture: 2 pounds alsike, 2 pounds Ladino, 4 pounds sweet clover, 4 pounds alfalfa, 8 pounds orchard grass. Use spring-tooth harrow before seeding. Sow with disc-drill after honeycombing of soil is past. Follow with spike-tooth.

``ORCHARD GRASS''

Since "married" to Ladino, this grass has won back the admiration of many folks who once disliked it. A very hardy, tall, leafy grass, popular for pasturing. Grows most anywhere, all types of soil. Very early and lasts late. For hay sow heavier and cut just as it blooms for best quality and yield. Hay quality also is improved when sown along with Tall Meadow Oat Grass and Meadow Fescue.

"POULTRY-RANGE MIXTURE"

Ten pounds perennial rye grass, 6 pounds Kentucky Blue and 4 pounds Canada Blue (or 10 pounds Kentucky Blue if soil is sweet), 2 pounds Red Top, 2 pounds Ladino, 1 pound Dutch Clover. On 1 acre... Sow late summer. Use following April. Needs frequent clipping—7 or 8 a summer. Carry 500 to 700 pullets per acre.





"PERMANENT PASTURE MIXTURE"

Today used on great numbers of Eastern farms with good results. Blended after long observation of growth characteristics of the various grasses over this territory. Two mixtures are offered; the Highland Mixture for well-drained hilly land, the Lowland Mixture for low, wet meadows. Both made up of quality grasses, carefully selected—and blended in proper proportions to produce heavy, lasting stands. They contain blue grasses, red top, orchard grass, some timothy, proper proportions of clovers and fescues or rye grasses. Sow either spring or fall, about 1 bushel (32 pounds) to the acre. Be sure to specify Highland or Lowland.

"MEADOW FESCUE"

Often called English Blue. Grows almost anywhere, but best in low, damp locations. Is hardy, early, 2 to 3 feet high. Stands dry or freezing weather. TALL (ALTA) FESCUE grows 6 to 12 inches taller. Makes more hay. Seed very scarce.

"TALL MEADOW OAT GRASS"

Great for poor but well-drained soils, especially when sandy or gravelly. Very hardy, perennial, highly nutritious. Pasture is ready early in spring and lasts late into fall. Hay yield is heavy when cut about blossom time. Tall, fast-growing. Deep rooted, cold and drought-resister. Up to 60 inches high, in tufts. Good with red clover, alsike and orchard. Destined for wider use.

"PERENNIAL RYE GRASS"

The rye grass which lasts through many years. Good, quick, rich grazing—can be cropped close. Grows on any soil not too wet. Relished by livestock. Advisable in many good mixtures.

Regular Rye Grass (see details, page 6). Widely used in pastures, temporary seedings, for cover-crop. Cost low. Use liberally. Above bottom-land pasture was considered "worn out." But was rejuvenated by reseeding with brome grass, sweet clover, alfalfa, alsike and timothy. Picture was taken the following summer.

Five Major Essentials for Producing Good Milk

The dairyman himself—the cow the milking methods—the utensils —care of the milk. Based on cleanliness . . . with the person and his practices. Healthy animals, housed properly. . . . Sound sanitary methods every day. . . . Thorough cleansing and sterilization. . . . Proper cooling.

FARM FACT: Good fencing helps to keep livestock and fertility at home.

Lights Help Layers

Besides lights, here are a couple other ideas found successful. Stir up the feed in hoppers several times daily. It makes for better feed consumption, hence improved egg production. Use of greens is good, too. . . . So is a mash (moistened with milk) once a day when production lags . . . about as much as will be eaten in about 15 minutes.

FARM FACT: The giant dragon that devours many fertile fields is uncontrollable water. . . A contour furrow is one short cut to the soil-saving goal.

Tractor Safety

Never can a man afford to step off a tractor with the power take-off in gear . . . or try to oil or adjust farm machinery while running.

Pasture Improvement

Good pastures mean black ink in the farm's books instead of red ink, because "summer milk is cheap milk." There is no cheaper feed for livestock than good pasture, obtained by liming, manuring, fertilizing, clipping, scattering droppings, and managing the grazing.

3 Rats or 2 Hens?

Three rats will eat, contaminate or destroy enough feed for two laying hens. With feed having to stretch like nowadays, it's not patriotic or good business to let them have it.

Mulch Berry Beds

Apply mulch to strawberries when ground freezes. Wheat straw best. Chopped rye straw, barley, buckwheat or oat straw. Even corn stalks, potato vines, shredded fodder or leaves, better than no mulch.

Clean Gardens Quickly

Promptly after crops are removed is best time. It helps control vegetable diseases next year. Some diseases harbor over winter in trash.

FARM FACT: Just a word about planting row crops up and down the hill. That word is—Don't!

Better Price for Wool . . . If:

1. Dry before shearing. 2. Cut on clean floor. 3. Dunglocks removed from fleece before rolling, skin side out. 4. Pack separately, offcolor fleeces, also those seedy and burry. 5. Store in cool, dry place, never in basement or where moisture can be absorbed.

How About Some Sheep?

Sheep build up the land and make good use of hillside pastures. Small flocks are being used to advantage on many Northeastern farms.

``TRIPLE-PURPOSE MIXTURE'': (1) Hay (2) Pasture (3) Grass Silage

Works fine for either purpose, as seasonal conditions dictate. You can well afford best cropland for such a producer. . . . Full formulae given in Alfalfa Section—page 18—please note. So you can know exactly how many pounds of each seed to order for your particular plan.

Hay uses of this mixture are discussed under "Ladino," pages 4 and 7, also under "Alfalfa," page 18—please read.

Pastures of this mixture should be given frequent rest periods. Either by not pasturing for several weeks at a time to allow the legumes to recover . . . or by several hours' grazing after each milking. Such recovery is essential to make good new growth and build food reserves in roots. Some dairymen put the milking herd on triple-purpose pasture only several hours each day after milking, then put them over into another pasture. If other such fields not available, fence off sections of this triple-purpose field, and alternate. The plan of several pasture areas is excellent. Some use up to four fields, grazing each one heavily for about a week in turn, thus allowing up to 3 weeks for each part's recovery.

In late months of the season, when growth is slower, grazing should be lighter. If grazed too closely, then Ladino and other plants, too, will tend to more easily winter-kill.

This seeding, properly managed, is doing a wonderful job . . . taking over the place alfalfa once held as chief meal supplier on many large dairy farms. It can surely be put into needed use this year, with seed for new alfalfa projects just about impossible to get.

"BIRDSFOOT TREFOIL"

Low-growing, perennial, stout root, bearing numerous slender spreading branches 6 to 18 inches long. Its main use has been for sowing into pastures. Starts slowly. Lasts longer through the season, too. Valuable on moist or somewhat heavy soils. Has thrived on ground too poor for alfalfa. Note page 5, first column.



"BROME GRASS" (LINCOLN TYPE)

A tall perennial, sod-forming, high-yielding, later-maturing—with strong creeping rootstocks. Builds thick, firm turf. Never gets woody. Thrives well on loose, dry soil; withstands drought unusually well. Slow to start. Desirable to sow with nurse crop or other grasses, especially when for hay. Brome reaches its full production in second or third year. Not adapted for short-term stands, nor will it stand heavy, close grazing.

Sow early spring or late summer (about two months ahead of frost to be sure of a start). Through a wider area, being used with alfalfa to produce abundant hay and pasture, especially during the heat and drought periods of July and August. Some folks claim this mixture more productive—in milk and butterfat records—than alfalfa alone. This brome-alfalfa plan is spreading. . . . Use only adapted brome seed. Some strains don't do well here. Hoffman has the right, adapted strain now . . . Lincoln type. Get acquainted with this valuable grass—its use is gaining. Many times the 1943 amount was bought by Hoffman patrons in 1944.

``CANADA BLUE GRASS''

Shorter, coarser, faster growing than Kentucky Blue—good on poor, rocky soil where Kentucky won't grow.

"CREEPING RED FESCUE"

This is the true creeping type. Proving a splendid producer in Eastern use. A very fine shade grass. This seed was produced in the North. Is hardy, tested and sound.

"REED CANARY GRASS"

Helpful in converting swampy ground into worth-while grazing, sometimes with a hay crop besides. One man found success with 8 pounds reed canary and 1 pound Ladino on heavy, wet sand loam, well prepared and fertilized. Not for acid soils. Has been good on uplands, too. Perennial, stems spread underground. Makes tough sod. Lasts years, but easily turned under with deep plowing. Best if kept closely grazed. Leaves broad, smooth. With limited pasturing, two cuttings annually may take place.

"CRESTED WHEAT GRASS"

A long-lived, leafy, perennial bunch grass; very drought-resistant. Withstands extreme cold. Early, long-season pasture. Grows 24 to 30 inches high, on almost any type of soil. Drill 12 to 16 pounds per acre—broadcast 20 to 25 pounds.

2 Good Points for Brome

"Our brome pastures more cattle per acre than other grasses" . . . and of his brome-grass meadow— "in case haying time comes along and the weather isn't perfect, brome can be let stand several days if necessary, and still make just as good hay," says an Iowa farmer.

Turkey "Bits" Help Control Cannibalism

Some turkey growers use bits as anti-picking devices. One type bit is made especially for turkeys. The hog ring is also used. The bit is placed through the turkey's nostrils, then through the mouth. The part held in the mouth prevents closing jaws tight enough to pick feathers. May interfere with eating for day or two. After that, the bird does not seem to suf-fer discomfort, and will eat and de-velop normally.

FARM FACT: Clover growing over a farm brings more good luck than a carload of horseshoes.

Manage Pastures to Get **Best Production**

After pastures have been improved by proper soil treatment, the next step is to turn the livestock on according to the condition of the grass, and not according to the

grass, and not according to the calendar. Unless the grass is kept grazed down, much of it will be wasted through becoming tough and un-palatable. The uneaten grass must be clipped promptly, or that part of the pasture will be wasted for the season, and the valuable white clover will be suppressed and smothered. smothered.

FARM FACT: It is bad enough to let weeds grow; it is worse to let them go to seed.

Important: Have Seeds **Mixed Right**

For your hay and pasture grass combinations, Hoffman offers an-other big advantage over ordinary seed sources. In addition to good seeds, Hoffman has the equipment to mix thoroughly the combina-tions of seeds you want. These seeds come to you ready for sow-ing—and you can depend on every part of the field getting the right mixture. mixture.

FARM FACT: The chief trouble with deep plowing is that there isn't enough of it at the right time.

Hoffman "Sudan Grass" - 3 Types



(Above) Hoffman "Tift" Sudan. Note the tall heavy growth, many wide leaves, how they shine! Free from disease, vigorous. A fine new variety . . . recommended.

(Below) Three ordinary sudan leaves affected with "leafspot" disease, and one unharmed "Tift" leaf.



Sudan—Good Emergency Pasture

Productive and palatable. Sown late May, on good fertile seed bed, will carry three cows an acre from mid-July until grass is killed by frost. **``TIFT'' SUDAN**—Developed in Georgia (by crossing regular Sudan with Leoti sorghum). "Tift" stands up under heavy late fall grazing. Will gain much wider use. Grows practically free of "leafspot" disease, which disease seriously affects the crop of old-type Sudan in some seasons. (Note picture left, the one unaffected blade of Tift below the damaged other leaves.) Vigorous grower, fine producer. Why not divide your Sudan acreage three ways?

``SWEET'' SUDAN—Like among other plants, breeders have now, by crossing, back-crossing and selection, produced "SWEET" Sudan grass. It is sweet, juicy, palatable to livestock. In all cases when planted alongside regular Sudan, cows ate the Sweet Sudan first. This new strain has definite disease-resistance bred into it. Because later it provides longer grazing seasons. Provides broader, more palatable leaves. Stools heavier. Cost is high but surely worth trial. Ask for special circular.

``REGULAR TYPE SUDAN''—Quick-growing annual, valuable for dairy herds because it produces green pastures quickly in a pinch.

For straight Sudan hay (about equal in value to timothy)—20 to 30 pounds per acre. It grows quickly—is often ready to cut 50 to 70 days after planting, ready to recut in another 50 days. It is all leaf, no stem, growing 5 feet or taller, stools remarkably—stands up well.

Mix Sudan and soy beans for green feed. Sow a bushel of soys with 12 to 15 pounds of Sudan. You can mix the Sudan with the fertilizer if you wish and save one trip over the field.

Some sow winter rye in fall, pasture it until April, then sow Sudan on same ground for fullyear pasture. Sow from corn planting to August. Don't feed after leaves are frosted.





`Japanese'' Millet—Let's overlook its name . . . but consider its usefulness. Most popular millet in Northern-Central areas. Known as "Million-Dollar Grass." Has made tremendous yields —up to 20 tons per acre. Tall variety. Thrives on poor soil. Valuable emergency hay. For green feeding, cut just before seed heads appear. Sow ½ bushel per acre (32 pounds per bushel).

"Golden" Millet—In Pennsylvania yields good crops in from seven to nine weeks. Makes satisfactory leafy hay. Sow 3 pecks per acre (48 pounds per bushel). HUNGARIAN MILLET used by some folks in more northern sections.

"Korean" Lespedeza — The Southern areas' great hay producer. Thrives on lands too poor for other clovers. Popular from Delaware and Maryland south. Good soil enricher. An annual legume, killed by frost, but often reseeds itself. Great drought resister. Has produced heavy tonnages in South. Sow 20 to 25 pounds per acre.

"Sericea" Lespedeza—Perennial strain of "Lespedeza" yielding finer hay. Preferred by many for its quality. Taller. Thrives on poor soils and in dry seasons. Cuts reseeding cost. Lasts several seasons. Not a Northern crop.

"Cow Horn Turnip"—Improves soil and provides forage. Tops relished by sheep, hogs and poultry, when sown in corn fields. Turnips penetrate deeply, bring fertility to surface and add humus to soil. Sow 2 to 4 pounds per acre.

``Canada Peas'' for Green Feed and Hogs For early green feed. And rich hay when ordinary pasture is sparse. For cattle, sheep and hogs. Plant very early. Growth is rapid, gives green feed when other seedings are just starting. Sow Canada peas with oats. Oats support the vines and makes more palatable combination than peas alone. Use $1\frac{1}{4}$ bu. of each per acre. First drill peas 3'' to $3\frac{1}{2}''$ deep. Then drill oats $1\frac{1}{2}''$ to 2'' deep. Pasture when about one foot high. Feed gradually at first to avoid bloating. After cut, a new growth will appear for later feed or pasture. Don't confuse Canada peas with cow peas. Cow peas dare not be planted early with oats—they will rot in cold ground.



Scene in a USDA laboratory.... Will your grass seed grow? If bought from Hoffman, definitely yes! Because of careful pre-testing for sound germination.

Graze Lespedeza Early

Early grazing won't hurt Korean lespedeza. Turn livestock on it before the plants are tall enough to hide their ankles, and keep them on so the plants don't get much higher than that.

Lespedeza Hay

Cut annual lespedeza for hay before lower leaves turn brown; red clover, half-bloom stage; timothy, early bloom; sweet clover, before first blossoms appear; mixed hay, when the legume is at the right stage.

Millet-Cow Peas Hay

Half of a bushel of millet with a bushel of cow peas per acre make a fine hay or green-feed combination. The millet grows quickly, produces a heavy crop even on poor land. It is best sown in June and July and cut for hay when seed heads have come on about a third of the plants—before the seeds harden or the growth gets "woody."

Hogs Need Sun Shelter

Artificial shade is helpful. Posts in the ground, with poles across them about 4 feet up, covered with about a foot of straw, fodder or other roughage, makes thick, cool shade —much better than boards or iron roofing. To prevent rooting and dust—sprinkle crankcase drainings on the floor of the shelter. This firms the floor—the oil aids control of lice and other parasites. Ample clean fresh water is important for proper gain and good health.

Lime Poultry Droppings

Liming them makes better manure, is more sanitary, and repels flies and rodents.

Avoid Damp Litter

Check the watering equipment. Especially in winter. Avoid leaky containers. Watch the arrangement of stand or jumping board so birds can't easily spill the water. . . . Better conditions for the chickens mean more profit for you.

Prisoners of war (Italian) helped in the beet harvest on this Livingston County, N. Y., farm (1943)—guarded by United States Military Police.



"Atlas Sorgo"—Gaining in use hereabouts. Makes strong stalks that don't lodge easily, like so many tall types do. Sweet juicy stalks combine the desired qualities of a sweet forage sorghum with strong stalks . . . and with seeds that may very readily be used as a grain feed. Outproduces grain sorghum in forage, except when very dry.

Plants are about $\frac{1}{2}$ inch thick and grow 7 to 10 feet high. Harvest when the seeds are in the hard-dough stage, using either a field ensilage cutter or a corn-row binder. Unless dry, seed shallow. Plant with corn planter, using the smallest plates. Cultivate same as corn.

Atlas Sorgo plants show a remarkable ability to remain green but dormant through long drought, and then resume growing after rain.

"Grain Sorghum" (Non-Saccharine)— Worthy crops: Kaffir, Milo, Hegari and Feterita yield heavily in both forage and grain. Whole plants may be fed—green, cured or ensiled. Unthreshed heads fed whole or ground—or threshed, and grain fed. Analyses of grain similar to corn. Less fat. Some sorghums high in protein. Carbohydrates practically equal.

"Sorghum Cane" (Saccharine)— These canes carry a sugar content and are valuable for cattle feed as green forage and as ensilage. For Amber and (or) Orange type, see price list.

"Hairy (Winter) Vetch"—Excellent green feed when cut in full bloom, as hay when pods are about half formed, or as green manure when seed is inoculated. Very good on sandy soils, or where red clover fails.

Because of great length of vetch plants, plant along with small amount of grain, such as wheat or rye. This very hardy strain is a biennial or winter annual. Usually sown in late summer or early fall. Be sure to inoculate.

"Spring Vetch"—Not winter-hardy, but often used successfully among spring pastures. Cost is lower than the hairy winter variety. Makes good growth when planted in the spring.

"Stock Beets" . . . for Succulent Feed— Where there is no silo—here is a source of good feed. Seed soon as soil warms. Six to 8 pounds per acre in drills—2 to 2½ feet apart. Thin plants to stand 8 inches apart. Cultivate frequently and shallow. Fertilize. Yield is often 8 to 10 tons per acre! Dug at frost and tops removed. Store in cone-shaped piles, at well-drained spot near barn. Cover with straw and dirt. Feed from such pits all winter. "Mammoth Prize Long Red" is a heavy yielder—about 110 days. Keeps well. "Rape" . . . for Quick Pasture—Inexpensive, prolific pasturage for sheep and hogs. Thrives on all soils with little preparation. Sow about 5 to 6 pounds of seed per acre, through spring up to end of August. Alone, with other pasture seeds, or in corn fields. Makes second growth. Pasture when less than 10 inches high. Stands hard usage. Easy to grow. Truly a great provider for many purposes.

"Cow Peas"—Fine for pasturage or hay, turning under or hogging down, on poor soil. Best in South, since cow peas dare not be planted early. Handle like soy beans. Inoculate. For hay or green feed, sow 1 bushel with 3 pecks golden millet to the acre, cutting when in bloom.

"CRIMSON" (SCARLET) CLOVER

Valuable winter cover crop. One user claims it "equal to 20 loads of manure per acre." Grows on soil too poor for red clover. Fine in orchards or corn fields. Be sure to inoculate. Seed 20 pounds per acre, June to late August. Matures following June. Best in South.

"HOG PASTURE MIXTURE"

For 11 Weeks' Hog Pasture at Low Cost Quickest growing green hog-feed mixture often ready in four weeks. Valuable as emergency pasturage when earlier crops have failed. Grows until frost, but will not winter. An abundant producer of flesh and fat, also of wool. For cattle, cut and haul to barn to prevent trampling. Second growth will then appear. Plant 70 pounds per acre, broadcast or with seeder, between June and August 1. Then harrow in.

Wise farmers encourage their boys and girls in 4-H Club work, and often become wiser still through clubsters. Delaware County, N. Y., girl (below) chose to raise 25 pigs as her 4-H project.

46

Orchard Cover Crops

Mixed crimson clover and winter vetch with a light addition of millet or rye as a nurse crop has given results. This is not worked down until the crimson clover is past full bloom and much of the dead cover is left on or close to the surface of the soil. This makes the soil so loose the new seeding must be firmed—by using a cultipacker. Rye grass makes an excellent ground cover, but must be worked down at the proper time.

Clipping Back Rape

Rape seeded for poultry pasture was clipped with a mower when it became too high before the flock got into it. Cutter bar was raised just high enough to spare the hearts of all stalks. New leaf growth came out rapidly to provide plenty of green feed within a few days after clipping.

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		TR7 - : 1 .	D 1
Page No.	Seed or Item	Per	Pounds Per
		Bushel	Acre
18 15	Alfalfa Alsike	60 60	9-2
16	Alsike and Timothy	45	8-12
45 20	Barley	50 48	12-15
45	Beets.		10
39	Blue Grass	14	30-40
42	Brome Grass, Smooth	14	25-30
42	Canada Blue Grass	48 14	48-60
44	Canada Peas	60	75-100
15	Clover, Alsike	60	6-9
46	Clover, Crimson	60	15-20
16	Clover, Dutch	60	6-8
7	Clover, Ladino	60	3-5
15	Clover, Midland	60	8-10
14	Clover, Red	60 60	8-10
24-31	Corn, Hybrids.	56	10-20
32	Corn, Regular Varieties	56	·····
44	Cow Horn Turnip	•••	3-4
46 35	Cow Peas Crow Repellent	60	60-90
16	"Economical Mixture"	56	12-20
46	Inoculant. Legume	• • •	50-70
39	Kentucky Blue Grass	14	
44	Lespedeza	60	15-20
40	Meadow Fescue	24	25-30
9-13	Oats	32-40	70-100
39 46	Orchard Grass	14	30-45
38-41	Pasture Mixtures	: 15 (1	
44 40	Peas, Canada Permanent Hay and	60	75-100
00	Pasture	32	32
36 46	Rape	60 50	5-8
42	Red Fescue, Creeping		10 12
42	Reed Canary Grass		10-12
6,40	Rye Grass	24	25-35
35	Seed Sower		00-04
35 21	Seed Treatment, Corn		
8	Seed Treatment, Legumes.		
37	Seed Treatment, Potatoes. Semesan Bel. Improved		
35	Semesan Jr., Improved		10.15
44 45	Sorghum (Čane)	50	10-15 60-65
22	Soy Beans	60	60-90
43	Sudan Grass	40	20-30
40	Tall Fescue	ii	
40	Timothy	45	8-12
16	Timothy and Alsike	45	8-12
44	Vetch, Spring	50	50-70
45	Vetch, Winter	60 60	30-60
42	Wheat Grass, Crested		00-120

INDEX

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