Plan for Control of Grasshoppers

Reliance Now Generally Placed on Application of Poisoned Baits.

(Prepared by the United States Department of Agriculture.)

The bureau of entomology, United States Department of Agriculture, is being overwhelmed with requests for information regarding, and samples of, a grasshopper disease which correspondents call "funk." These requests apparently had their origin in a letter published by a Texas newspaper which stated in effect that many years ago the writer of the letter was supplied by the department with a small quantity of this disease which was distributed in accordance with directions and resulted in the complete control of the grasshoppers. This statement is believed to relate to a fungous disease of grasshoppers with which the department was experimenting. The final results secured from these and subsequent experiments, however, were of so unsatisfactory a character as to lead to the entire abandonment of this method as a practical means of control.

Rely on Poison Bait.

It is now realized that fungous and other diseases of grasshoppers exist in nature practically everywhere that the insects become numerous, but that they are effective only under certain favorable climatic conditions which are not under human control. Reliance for the control of grasshoppers is now generally placed on the application of the poisoned baits with which agriculturists in those parts of the country where grasshoppers are troublesome are quite familiar. The department does not recommend or distribute "funk" or any other disease for the destruction of grasshoppers, but recommends the application of the standard poison bran bait which has given excellent satisfaction under most conditions. This bait may be prepared as follows:

Wheat bran—100 pounds.
Crude arsenic—5 pounds.
Amyl acetate, technical grade, 3 ounces.
Molasses—2 gallons.
Water—10 gallons or more as required to make a wet but not sloppy mash.

Mixing the Bait.

The bran and arsenic should be thoroughly mixed while dry. This is important as upon the thoroughness of this operation depends the uniformity of results likely to be secured. The amyl acetate may be added to the molasses after this has been diluted with the required amount of water and the complete mixture should then be poured over the poisoned bran and the whole mass thoroughly mixed until uniformly wet. The bait is then ready for distribution and this should occur by sowing it broadcast on the infested fields at the rate of about ten pounds to the acre, although as much as fifteen pounds is used in some cases. A coarse flaked bran is best for this purpose but any kind of bran or even middlings may be used where necessary. A broadcast grain seeder mounted on a wagon has been used successfully for the distribution of the bait in some localities. Grasshoppers feed most on bright sunshiny days and usually between the hours of 9 a. m. and noon. For this reason it has been found best to apply the bait during the early morning before feeding begins.

"The Great Open Spaces"

Realism predominates in our literature; but the western story is still in the hands of the romanticists. The writers still sing of the great open spaces where a man's a man without mentioning the unutterable loneliness of these places and the crudeness of the men therein! Realists, awake! There never will be any better places to kick in the seat of the pants the great god, Romance, than these same open spaces. —Laura Kirkwood Plumb, in Scribner's Magazine.

Chemicals in Water

No fewer than 30 different chemicals have been discovered in sea water.

POULTRY

FORCED PULLETS ARE BEST EGG PRODUCERS

James E. Rice of the Cornell university experiment station issued a bulletin relative to the possibilities of feeding early hatched pullets during the summer by retarded or forced feeding.

By retarding is meant the idea that feeding is necessary during the late summer to check the early tendency of laying, with the hope of getting a larger egg yield in the early winter.

By forced feeding is meant the giving of a rich stimulating mash to induce egg production.

Concerning the results of his work Mr. Rice has certain findings drawn from data which are submitted below:

1. Forced pullets made a better profit than retarded pullets.
2. Forced pullets ate less food per hen at less cost per hen than retarded pullets.
3. Forced pullets produced more eggs of a larger size, at less cost per dozen than retarded pullets.
4. Forced pullets produced more eggs during early winter than retarded pullets.
5. Forced pullets have better hatching results of eggs than retarded pullets.
6. Forced pullets made a better percentage of gain in weight than retarded pullets.
7. Forced pullets showed less broodiness than retarded pullets.
8. Forced pullets had less mortality than retarded pullets.
9. Forced pullets showed better vigor than retarded pullets.
10. Forced pullets showed the first nature molt earlier than retarded pullets.
11. Retarded pullets gave better fertility of eggs than forced pullets.
12. Hopper-fed dry mash gave better results in gain of weight, production of eggs, gain in weight of eggs, hatching power of eggs, days lost in molting, mortality, health and profit per hen, than wet mash.
13. Wet mash and grain-fed pullets consumed slightly less food at less cost, and produced eggs at slightly less cost per dozen than dry mash and grain-fed pullets.
14. Wet mash and grain-fed pullets produced slightly larger eggs of slightly better fertility, and showed less broodiness than dry mash and grain-fed pullets.
15. Dry mash and grain-fed pullets laid eggs of good size at an earlier period than wet mash and grain-fed pullets.
16. Hopper-fed pullets ate more than hand-fed pullets.
17. Pullets having whole grain ate more grit and shell than those having a proportion of ground grain.
18. Pullets fed on grain were more inclined to develop bad habits than those having a mash.
19. Earliest producers did not give as many eggs in early winter.
20. Early layers gained as rapidly in weight as those beginning later to lay.
21. Prolificacy made by slight difference in weight of hen and weight of egg.
22. The most prolific pullets did not always lay earliest.

Give Pullets Best Feed and Careful Attention

"The success of the poultryman is measured very largely by the quality of the pullets with which he replenishes his flock," says Martin Decker, poultry research specialist at the New Jersey agricultural experiment station.

"Great care should be exercised to keep the pullets growing uniformly from hatching to maturity, as a check or setback will cause them to mature too late for winter laying. Development is best promoted by free range with an abundance of shade and green food.

"We feed grain and keep mash before the growing stock continually. The mash is composed of nearly the same combination as our laying mash, but the pullets tend to begin laying too early if allowed too much of it. We must figure on having the pullets come into production about the middle of October, or before cold weather sets in.

"The pullets should be transferred to winter quarters, gradually—a few at a time. Do not put on the lights until they have become accustomed to their new surroundings. Then feed the laying flock the following rations:

Mash
100 lbs. wheat bran
100 lbs. wheat middlings
100 lbs. cornmeal
100 lbs. ground oats
100 lbs. meat scrap
Grain
100 lbs. wheat
100 lbs. cracked corn
100 lbs. oats.

Hens Pasture Feeders

Hens are pasture feeders, though seldom considered such on many farms, in that they are fenced away from good pasture. J. G. Halpin of the poultry department of the University of Wisconsin says that a heavy-laying hen will not last long unless the bowels are kept in a laxative condition. Most poultry keepers find green stuff more practical than drugs. Green feed adds the necessary bulk to the ration and apparently assists in the assimilation of minerals.

RIDE 'IM, COWBOY

(Copyright by R. R. Doubleday.)

An animated tornado on four legs, 1,200 pounds of living dynamite—such is the "outlaw" bronk, scores of which will provide the chief thrills of the Chicago Roundup and World's Championship Rodeo, to be held for nine days, beginning August 15. Wiry and daring, coolest when facing almost certain injury—such is the buckaroo, standard type of the men who will fight it out with the "bad" horses in the Chicago contests.

Broncho busting calls forth all the courage that is traditional on the western ranges and a great part of the $30,000 in prizes appropriated by the Chicago Association of Commerce, under whose auspices the rodeo will be presented, will go to the men who will fight to stay for a few seconds on the hurricane decks of the "sunfishing," "skyscraping," squealing, fighting cayuses. When the courage of the buckaroo clashes with the lawless spirit of the broncho, the ride is always to a sensational finish. Tex Austin, famous through his many successful rodeos and who will manage the Chicago spectacle, already has contracted for the top bronks from the three greatest strings of bucking horses in the West.

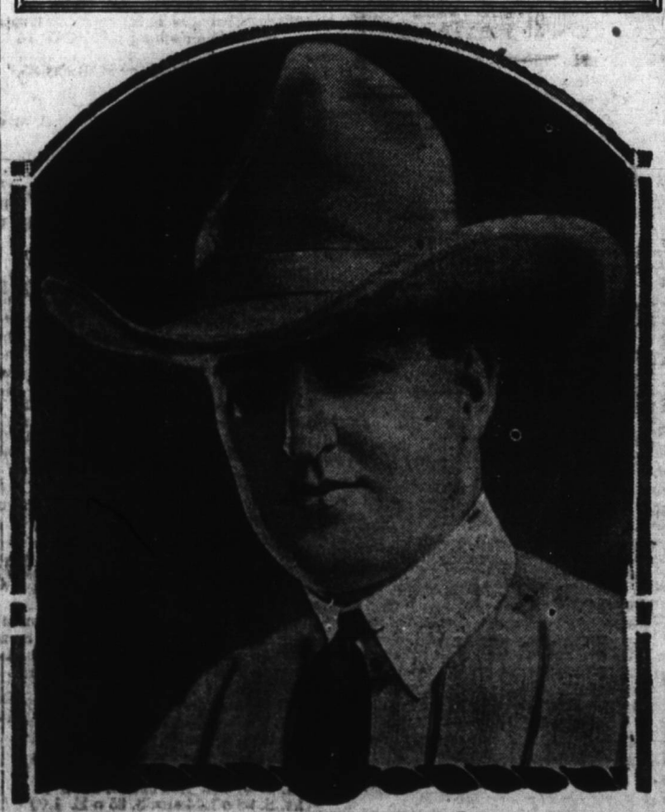
DYNAMITE ON THE HOOF

(Copyright by R. R. Doubleday.)

Riding a wild steer is anything but a "pink tea" sport and if you don't believe it, ask any of the many cowboys who will try to stay on these chunks of living dynamite during the Chicago Roundup and World's Championship Rodeo, beginning August 15. The Brahma steer, a cross between the Mexican longhorn and the Brahma, or sacred cattle of India, is a fighter from the word "go," according to the boys who have tackled them, and after throwing a rider they'll frequently try to muss him up.

Steer riding, calling for an excess of skill and daring, is one of the features of the Chicago Roundup, which will be held under the auspices of the Chicago Association of Commerce for nine days. The competitions are under the direction of Tex Austin, who has managed the largest and most successful of rodeos. More than $30,000 in cash prizes will go to the winners of the events, together with the world's championship titles.

KING OF THE RODEOS



(Copyright by R. R. Doubleday.)

Tex Austin, a name that is known in every locality in the country where horses are bred or cattle raised. Such is the man who will draw on his years of experience to manage the Chicago Roundup and World's Championship Rodeo to be held for nine days, beginning August 15.

"King of the Rodeo" is the title Austin has won. Born in the great state for which he was named, he was raised in the atmosphere of the range. He participated in the thrilling deeds of the famous contests of the Far West and then became a ranchman himself. Wherever the roundups have been staged, Austin's name has become synonymous with the cowboy sport. In the effort to perpetuate the spirit of the West, he managed and directed numberless rodeos in the West, also giving the East its first thrills from cowboy contests. Then, spreading the fame of Uncle Sam further, he put on the great international rodeo at Wembley, England, under the auspices of the British government.

DAIRY

ALFALFA HAY BEST FOR DAIRY CATTLE

Alfalfa hay proved superior to sudan hay as a feed for dairy cattle at the Hays (Kans.) experiment station in the third trial comparing the merits of the two feeds, according to the report given by Prof. J. B. Fitch at the annual Kansas roundup.

This trial, conducted during the past year at the Hays station, gave results agreeing with those obtained in the first trial when cows fed alfalfa hay, kafir silage and grain in proportion to milk production produced 13 per cent more milk each day than the same cows when sudan hay was substituted for alfalfa hay.

In the second trial, however, the cows fed sudan hay, kafir silage and a liberal grain ration produced slightly more milk each day than the same cows when alfalfa hay was substituted for the sudan hay.

Eight Holstein cows were used in the third trial. They averaged 575 pounds of milk and 21.5 pounds of butterfat daily while fed alfalfa hay as compared with 511 pounds of milk and 19.7 pounds of butterfat on sudan hay.

"Cows fed alfalfa hay, kafir silage, and a liberal grain ration, produced 8 per cent more milk and 10 per cent more butterfat than the same cows when fed sudan hay," said Professor Fitch in summarizing the results of the third experiment. "The body weights of the cows were practically constant during the three periods. The alfalfa hay was consumed in larger amounts than was the sudan hay.

"In two of the three feeding trials comparing alfalfa hay and sudan for dairy cattle at the Hays station, alfalfa has proved to be better than sudan. In the trial where sudan proved better than alfalfa, the alfalfa hay was of inferior quality. In all three trials the liberal grain ration and the relatively short feeding periods apparently have reduced the difference between alfalfa hay and sudan hay. This statement is made as the result of a large number of feeding trials with dairy cows comparing feeds similar to those used in this experiment. Alfalfa hay and sudan have practically the same amount of digestible protein as has sudan. The quality of the protein in alfalfa is also superior to that from other hay crops and grains that have been compared experimentally to date. As a source of minerals for dairy cows the legume hays, and especially alfalfa, are of special importance. To maintain milk production and body weight over a large period of time when on sudan hay cows must be fed a grain ration containing a protein supplement. In regions where alfalfa cannot be grown and where it is high in price it is desirable to feed three or four pounds of alfalfa daily to dairy cows as an additional source of minerals and for the protein it contains."

Soy Beans Are Superior as Protein Supplement

Cracked soy beans are equal or slightly superior to linseed oilmeal as a protein supplement for dairy cows. After three separate trials with this new feed, investigators at the Iowa experiment station have reached the above conclusion.

Furthermore, they demonstrated that soy beans do not cause scours under the conditions existing in the experiment. The basal ration consisted of corn silage, alfalfa hay, cracked corn and ground oats. Roughage was fed according to the capacity of the cows and the grain mixture according to production.

No tendency in the beans to become unpalatable over long feeding periods was observed so long as a daily allowance of four pounds was not exceeded.

When the price for soy bean seed gets lower and reasonably large acreages are planted, soy beans can be extensively used.

Soy bean oilmeal, which is the product left after oil extraction, was also tested at the Iowa station. Its value was found equal to that of linseed oilmeal. The relative prices of the two feeds will determine which is the better to buy.

Planted with corn for silage, soy beans did not show any value, according to the Iowa tests. Work done so far indicates that corn silage is of practically the same value as corn-bean silage for the production of milk and butterfat. The tonnage per acre showed an increase of 5.69 per cent where the two crops were grown together, compared with corn alone. The costs for seed and seeding largely offset the advantage in tonnage, however, making straight corn silage practically as economical as corn-bean silage.

In the first trial the percentage of beans in the silage was about 3 and the second 25. No advantage was noted in the increased percentage. There was practically no difference in the palatability.

Soy Bean Meal Value

The value of soy bean meal for producing meat, milk, and butter is well established. It is one of the cheapest of the highly nitrogenous feeding stuffs and is therefore economical for balancing rations deficient in nitrogen. Owing to its high content of protein the meal should be used with the same precautions as are observed with other highly concentrated feeds. As regards digestibility, soy bean meal compares favorably with other oil meals.

Air Cleaner Needed on Various Farm Tractors

Give your tractor clean air, says Prof. E. R. Gross, rural engineer at the New Jersey State College of Agriculture, New Brunswick. "To burn a gallon of gasoline about 19,000 gallons of air must pass through the engine. Under field conditions this air may be laden with dust. The dust is absorbed by the oil on piston and cylinder walls and grinds out rings, pistons and cylinders.

"Little wonder, then, that the rings need replacing, that there is piston slap and that compression is lacking. Almost any of the types of air cleaners used on garden or field tractors remove 90 per cent or more of the dust from the air. How foolish, then, to discard the air cleaner as useless. It is really as important as good lubrication, proper adjustment and care."

Produce Infertile Eggs After Hatching Season

Now that the hatching season is over, it is wise to separate the roosters from the hens. Hens will be quieter and lay better without them and the roosters will be given an opportunity to recuperate. Still more important is the fact that infertile eggs will keep longer. Three or four days during warm weather will produce a visible germ spot in a fertile egg and it will spoil quickly. Unless you have roosters which will readily improve your flock next year, they should be disposed of anyway and better cockerels secured this fall. Swat the poor rooster.—O. C. Krum, Extension Service, Colorado Agricultural College.

Control Chicken Mites

To kill chicken mites it is necessary to treat the house and fixtures rather than the birds. The house and equipment should be cleaned thoroughly. Then the house should be sprayed with a solution made of some good stock dip in the proportions of 13 tablespoonfuls to 1 gallon of water, or 1 to 3 gallons. After the house is sprayed, the roost poles should be painted with a full strength solution of dip, crude oil or creosote.

Notice! Trustee's Sale of Real Property.

Under and by virtue of the power of sale contained in a certain deed of trust executed to the undersigned Piedmont Trust Co., Trustee, on the 15th day of July 1921, by Real Estate Investment Co., for the purpose of securing the payment of certain bonds described in said deed of trust, which said deed of trust is recorded in the office of the Register of Deeds for Alamance county in Deed of Trust Book 89 at page 166, default having been made in the payment of said bonds and the interest on the same, and the said bond holders having requested foreclosure under the said deed of trust, the undersigned Piedmont Trust Co., Trustee, will on

MONDAY, JULY 27, 1925,

at 12:00 o'clock noon, at the courthouse door of Alamance county in Graham, N. C. offer for sale, at public auction, to the highest bidder for cash, the following described real property, to-wit:

That certain lot or parcel of land in the City of Burlington, North Carolina, on Andrews St. in said City, and known and described as Lots No. 20, 21 and 22 in the new survey, being a part of Lot No. 131 according to the plan of said City, described as follows:

Beginning at the corner of Andrews and Worth Streets; thence with Andrews St. 34½ E 90 ft. to an iron bolt on Andrews St., corner with Piedmont Securities Co; thence with line of Piedmont Securities Co. 64 ft. 8 in. to a twelve ft. alley way, which alley way is dedicated to the City; thence N. 34½ W. 90 ft. to Worth St; thence with the line of Worth St. N. 55½ E. 64 ft. 8 in. to the Beginning, upon which property is located a four story brick building.

This sale is made subject to advance bids as allowed by law and will be held open for ten days after date of sale for the reception of such bids.

This the 16th day of June, 1925.

PIEDMONT TRUST COMPANY, Trustee.

Summons by Publication

NORTH CAROLINA—
ALAMANCE COUNTY.
In the Superior Court.

Mamie Sutton Taylor
vs.
Will Taylor

The defendant above named will take notice that an action entitled as above has been commenced in the Superior Court of Alamance County, North Carolina, for divorce; and the said defendant will further take notice that he is required to appear before D. J. Walker, Clerk of the Superior Court, at his office in Graham, North Carolina, on the 7th day of July 1925, and answer or demur to the complaint in said action, or the plainfiff will apply to the court for the relief demanded in said complaint.

This the 17th day of June, 1925.

D. J. WALKER,
Clerk Superior Court.
Henderson, Kernodle & Bradshaw, Attys