

OF INTEREST TO FARMERS

FATTENING SPRING PIGS

For some time there has been some confusion in the minds of many hog feeders relative to the kind of a protein supplement one should feed with corn and other grain to hogs that were being fattened for market on alfalfa pasture. One experiment station felt that a series of tests under local conditions was needed to help clarify the situation. Five lots of spring pigs averaging around 63 pounds when the test started on June 22, 1931, were used in making this study of protein supplements. The test ran 120 days and was closed October 20, 1931. Each of the five lots were fed, the corn from one compartment and the protein supplement from another compartment of the same self-feeder. No mineral were fed. Lot 1, fed corn plus tankage, produced 1.62 pounds per head per day; consumed a daily ration of 5.2 pounds of corn, and .21 pounds of tankage; required 320.73 pounds of corn to make 100 pounds of gain; and produced gains at a cost of \$47 per cwt. Lot 2, fed corn plus tankage 1 part and cottonseed meal 1 part, gained 1.66 pounds per head per day; consumed a daily ration of 5.28 pounds of corn; .16 pounds of tankage, and .16 pounds of cottonseed meal; required 318.23 pounds of corn; 8.54 pounds of cottonseed meal to make 100 pounds of gain; and produced gains at a cost of \$46 per cwt. Lot 3, fed corn plus cottonseed meal 1 part and cottonseed meal 1 part, gained .94 pounds per head per day; consumed a daily ration of 3.37 pounds of corn; 10 pounds of linseed oil meal; and 10 pounds of cottonseed meal; required 360.04 pounds of corn; 10.05 pounds of linseed oil meal; and 10.05 pounds of cottonseed meal to make 100 pounds of gain; and produced gains at a cost of \$3.80 per cwt. Lot 4, fed corn plus tankage 1 part, linseed oil meal 1 part, and cottonseed meal 1 part, gained 1.58 pounds per head per day; consumed a daily ration of 4.96 pounds of corn; 13 pound of tankage; 13 pound of linseed oil meal; and 13 pounds of cottonseed meal; required 313.15 pounds of corn; 8.08 pounds of tankage; 8.08 pounds of linseed oil meal; and 8.08 pounds of cottonseed meal to make 100 pounds of gain; and produced gains at a cost of \$3.51 per cwt. Lot 5, fed corn plus tankage 2 parts and linseed oil meal 1 part, gained 1.87 pounds per head per day; consumed a daily ration of 4.39 pounds of corn; .18 pound of tankage; and .9 pound of linseed oil meal; required 322.31 pounds of corn, 10.42 pounds of tankage, and 5.21 pounds of linseed oil meal to make 100 pounds of gain; and produced gains at a cost of \$3.51 per cwt. The cost of feeds used in this test were: Shelled corn 56 cents per bushel; tankage \$30 a ton; cottonseed meal \$25 per ton; and linseed oil meal \$30 per ton. There was no significant difference in either the daily gains or the feed required to make 100 pounds of gain in the lots where tankage was used alone or as a part of the protein supplement fed (lots 1, 2, 4 and 5). The reduction in the cost of gains by adding either both linseed oil meal and cottonseed meal did not exceed 5 cents per 100 pounds of gain produced. This emphasizes the fact that tankage alone was not materially improved as a protein supplement for hogs that are being fattened on good alfalfa pasture, by mixing either linseed oil meal or cottonseed meal with it.

The value of tankage as a protein supplement in a ration for hogs being fattened for market on good alfalfa pasture is further indicated by comparing lots 2 and 3. In lot 2, tankage and cottonseed meal were mixed half and half. In lot 3, linseed oil meal and cottonseed meal were mixed half and half. The daily gains were nearly 80 per cent greater and the cost of gains nearly 11 per cent less in lots 2, fed tankage and cottonseed meal than in lot 3, fed linseed oil meal and cottonseed meal. Further evidence of the value of tankage is seen in a comparison of lots 4 and 5. It will be noted that in lot 4, receiving one-third tankage, one-third cottonseed meal, and one-third linseed oil meal as a protein supplement, the large and economical gains made in this test are a reflection of the value of good breeding, a growthy type, and rigid sanitary methods in producing hogs, as well as good rations. This test also indicates the possibility of producing large and economical gains without the use of minerals when tankage is used alone or as the basis of the protein supplement in hog feeding rations. The cost of the concentrates to produce 100 pounds of gain was considerably greater in a drylot than on alfalfa pasture, but the alfalfa consumption was decidedly greater on pasture. In spite of this, gains were produced more cheaply and it was much easier to maintain sanitary and healthful conditions on alfalfa pasture. The frequency with which the question of the necessity of fattening hogs in a drylot during the summer months and substituting alfalfa hay for alfalfa pasture is asked, prompted a series of tests for the purpose of securing data that would help answer this question. Each year both lots received corn supplemented with tankage, one lot being fed on pasture and the other receiving alfalfa hay in a drylot. The results of this year's tests may be summarized as follows:

Lot 1, fed corn and tankage on alfalfa pasture gained 1.62 pounds per head per day; lot 6, fed corn and tankage in a drylot gained 1.51 pounds per head per day.

Lot 1 consumed 520 pounds of corn and 21 pound of tankage per

FEEDING LAMBS

The addition of corn silage to a ration of shelled corn and alfalfa hay increased the rate of gain and reduced the cost per pound of gain. It was found in experimental studies. The addition of linseed meal to a ration of shelled corn, alfalfa hay and corn silage resulted in more rapid daily gains and a slight reduction in cost of gains. The addition of linseed meal to a ration of oats, corn silage and alfalfa hay increased the daily gains and reduced the cost per hundred-weight of gain. A ration of barley, corn silage and alfalfa hay proved nearly equal in all respects to a ration of shelled corn, silage and

head daily, whereas lot 6 consumed 5.51 of corn, 46 pound of tankage, and 22 pound of alfalfa hay.

Lot 1 required 320.73 pounds of corn and 13.22 pounds of tankage to produce 100 pounds of gain. Lot 6 required 364.66 pounds of corn, 30.48 pounds of tankage, and 14.53 pounds of alfalfa hay. The cost of the corn and tankage to produce 100 pounds of gain was \$3.47 in the case of lot 1 fed on alfalfa pasture, and \$4.26 in the case of lot 6 fed in a drylot. The difference in the actual cost of gains is not as great as the difference in the cost of the concentrates to produce 100 pounds of gain might indicate at first thought. Counting the cost of the hay consumed at \$8 per ton, the cost of gains in the drylot was \$4.32 per cwt. Estimating the hay value of the alfalfa pasture consumed at \$8 per ton, the cost of gains on alfalfa pasture would be \$3.89 per cwt. In spite of the greater amount and value of the alfalfa hay consumed by the pasture-fed hogs, the costs of their gains were 10 per cent cheaper than the gains in the drylot, but, in addition, we must count against drylot feeding the cost of harvesting and feeding the hay and the greater cost of maintaining sanitary and healthful conditions in a drylot.

PUTTING FLOWERS TO BED

Shrubs are usually thought of as being so hardy that no winter protection is necessary. Any that are liable to be injured by the colder winters should be planted in a location that furnishes some protection from the prevailing winter winds. Young shrubs can be wrapped with burlap to bring them through the first winter and get them well established, but it is more wise to plant only those of proven hardiness, for there are many from which to choose, says an experienced horticulturist. I have, he says, wrapped althea the first two winters, but they have reached such size now that they will have to try to endure the coming winter without protection. That is a good example of a shrub that likes a protected winter location. My method of protecting roses in winter, (I refer to hybrid teas) is to set a large pall or box, without bottoms, over the plant, then fill the box or pall to the top with soil. The soil keeps the bark and buds on the stems from freezing dry during the winter. In early spring the soil is gradually removed. I lift off the protecting box first, then the soil will fall away from the plant somewhat and then I begin removing the soil a few days later. Climbing roses that need protection should be tied to their summer supports instead of being woven through. This permits them to be let down to be wrapped for winter. They may be wrapped with burlap, cornstalks, or covered with soil. I know of one farm home that has a low iron fence covered with red rambler roses interwoven through the fence. These roses were protected by tying a layer of cornstalks against them on either side of the fence. This method might be done more easily than letting the canes down, where the supports have been reached from both sides. Mulching is not to keep plants warm, but to keep them cool. This sounds foolish, but just as wet clothes hung upon the line in zero weather will freeze dry, so do the plants suffer from freezing dry. The soil should be put on until the ground is frozen for the winter, and then its purpose is to keep the ground frozen by preventing the warming rays of the sun reaching the surface of the soil and the crown of the plants. The mulch should be thick enough that the sun's heat will not penetrate, but should not be so compact that air is excluded. For instance, cottonwood leaves when wet and then frozen are a solid covering through which no air could circulate and would do more harm to the plant by smothering than to have left it without a covering. Tomato vines would keep out the sun's rays and still allow a passage of air so the plants could breathe. Oriental poppies like a loose, coarse mulch which they can "see through." This is where I especially like to use the tomato vines. I do not find it necessary to mulch phlox, chrysantheums, or iris. I cut tops off the first two, leaving stems about four inches high which catch the leaves that the wind blows about, and they have always come through fine. The iris is left entirely to care for itself, the only attention it gets is to remove and burn any dead leaves which might carry disease spores. Peonies winter without extra care, but I like to cut off the tops, leaving stems about four inches high and replacing some of the tops among the stems to protect the crown. Pyrethrums appreciate some mulch between the clumps. I do not cut off their tops. Shasta daisies are less hardy than some perennials and should have a loose mulch material. Mulches must be held in place to prevent winds blowing them about. Narrow boards or small branches are good. Heavy cord stretched tightly across the mulch and tied to stakes driven into the ground at the edge of the mulched area is very satisfactory and not unsightly. Forget-me-nots like a moist winter bed, and after giving them a loose mulch, I water them frequently so that the soil does not freeze dry about them. Delphiniums cannot endure moisture about their crowns, and a fire shovel full of light cinders on each crown is a popular way of caring for them. Digitalis and cantenbury bells are two others which cannot endure wet crowns. The leaves should be lifted and coarse mulch placed under them. Evergreen branches may be laid over the bed. These are some of the most common grown perennials that will give full satisfaction for the least effort on the part of the farmer.

EVER TRY IT?

Grasshoppers of the varieties which have been causing the most damage to crops this year lay their eggs in pods deposited in sod roots just under the surface of the ground, each pod containing from 75 to 100 eggs. Farmers can destroy these pods by disking the sod. The eggs then are exposed to the sun and air. The egg embryos are killed by the drying action of the wind and sunlight.

LITTLE KNOWN OF OLD BIBLICAL CITY

Archeological Find Brings Sephoris to Memory.

The St. Louis Globe-Democrat says in commenting on the discovery by University of Michigan archeologists of the remains of a Roman theater and early Christian church at the site of Sephoris in Galilee:

Few people ever heard of Sephoris. It is nowhere mentioned in the Bible. Even in the synoptic gospels, which deal largely with events in Galilee, its name does not appear. Yet it was at that time the largest city in Galilee, Josephus says, and he also describes it as the "chief ornament of Galilee." In political and social importance it was rivaled in the period of which the gospels treat by the new city of Tiberias, which King Herod Antipas had built and made his capital. But during the childhood and youth of Jesus, and in the next generation after him, judging from the statements of Josephus, Sephoris held first rank.

And the silence of the gospels as to this city seems all the more strange in view of the fact that Sephoris was only a few miles from Nazareth. From one place to the other was a walk of only about two hours, and the walls of Sephoris must have been in plain view from the top of the rise on the north side of Nazareth. Jesus, therefore, must have been intimately acquainted with it and often within it. During the youth of Jesus, Herod Antipas established his capital there, residing there until he built Tiberias, and he built a palace and other edifices upon Greek lines. Perhaps the theater just discovered was built by him. At any rate there was active building going on there when Jesus was in his early manhood, and a recent biographer (Case) thinks it probable that Jesus as a carpenter was employed in some of this work.

All this marks the discovery just reported of peculiar interest to Bib-

lical students. That the place is not mentioned in the gospels is no argument against their credibility. The city of Tiberias is mentioned but once and that quite casually, and other places of known importance not at all. In fact, very few places are mentioned by name, although there were 204 cities and towns in Galilee, according to Josephus. Josephus himself names many of these places but he does not mention Nazareth. Yet Nazareth was there, and Josephus, was a credible historian.

"Tracer" for Debtors

The debtor who has vanished to parts unknown, leaving unpaid bills, may now be traced through the Post Office department for a fee of 23 cents, by a recent act of congress. The creditor sends a registered letter to the last known address of the debtor, marking the letter "return receipt requested showing address where delivered." If the postal department is able to deliver the letter, and usually it is, a receipt will be returned to the sender showing the new address. Heretofore it has been impossible to obtain such forwarding addresses from the post office.

Couldn't Reach Pedals

Virginia Wood reports the following story which has a laugh in it: Tommy Ware is the two-and-a-half-year-old son of Mr. and Mrs. Thomas Ware, and he took his first ride on a horse recently.

It was a large horse, and Tommy on top looked about like the shelter house on Pike's peak. He inspected everything from his high perch and then noticed the empty stirrups hanging far below him.

"It's no use, I can't ride, Gina," he said to his cousin. "I can't reach the pedals."—Kansas City Star.

Realism in the movies has never yet introduced the sound of a coffee grinder—one of the most characteristic in a lumber camp.

There isn't a great deal of peace and tranquillity because multitudes of people don't want it.

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McKesson's **ALBATUM** 35¢  
Stainless "Rub In" and inhalant unsurpassed in preventing and relieving cold congestions  
QUALITY SINCE 1833 McKesson & Robbins SOLD AT ALL DRUG STORES

**Foxy**  
"Flora is a wife whose husband can't put anything over on her."  
"How's that?"  
"When she heard him talking in his sleep she went to sleep herself and talked right back at him."—Vancouver Province.

**Belated Belle**  
"Maud seems to be a thoroughly up-to-date girl."  
"Well, she isn't. She's six years behind in her record of birthdays."—Boston Transcript.

**Bitter-Sweet**  
Revenge may be sweet, people who take it are usually soured by it.

Life without fighting would make some natures miserable.

**Clover as Fire Check**  
The Pennsylvania department of forests and waters is experimenting with clover growths as a means of checking fire outbreaks in the woods. Experiments have shown that the clover will remain green during dry weather and will form a mat thick enough to impede the advance of the fire.

**Flattering**  
Naturally women like a strong, silent man; they think he is listening to them.

Nothing is so hateful to witness as a family row in which you are not involved.

The pure in heart—are comparatively scarce.

For winter **COLDS**



When your children have the "sniffles" from one wintry week to the next, give them Scott's Emulsion of Cod Liver Oil. Doctors say that its rich Vitamin A content wards off colds, increases resistance to illness, promotes growth. And its valuable Vitamin D and mineral salts build strong bones and teeth. Scott's Emulsion is good for adults too; it helps them keep well in winter. Its pleasant flavor makes it easy to take. Scott & Bowne, Bloomfield, N. J. Sales Representatives, Harold F. Ritchie & Co., Inc., New York.

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MAKE OF CAR	TIRE SIZE	Firestone Oldfield Type Cash Price Each	*Special Brand Mail Order Price Per Pair	Firestone Oldfield Type Cash Price Each	*Special Brand Mail Order Price Per Pair	Firestone Oldfield Type Cash Price Each	*Special Brand Mail Order Price Per Pair
Ford.....	4.40-21	4.98	9.96	4.35	8.70	8.50	17.00
Chevrolet	4.40-21	4.98	9.96	4.35	8.70	8.50	17.00
Ford.....	4.50-20	5.00	10.00	4.78	9.56	9.26	18.52
Chevrolet	4.50-20	5.00	10.00	4.78	9.56	9.26	18.52
Ford.....	4.50-21	5.69	11.38	4.85	9.70	9.40	18.80
Chevrolet	4.50-21	5.69	11.38	4.85	9.70	9.40	18.80
Ford.....	4.75-19	6.65	13.30	5.85	11.70	11.14	22.28
Chevrolet	4.75-19	6.65	13.30	5.85	11.70	11.14	22.28
Erskine-Plymouth	4.75-20	7.75	15.50	6.75	13.50	13.26	26.52
Chandler-Dodge-Dodge-Dodge-Dodge-Dodge	5.00-19	6.98	13.96	5.99	11.98	11.60	23.18
Erskine-Plymouth	5.00-20	7.10	14.20	6.10	12.20	11.90	23.80
Erskine-Plymouth	5.00-21	7.35	14.70	6.35	12.70	12.40	24.80
Oldfield	5.25-21	8.57	17.14	7.37	14.74	14.52	29.06

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More Thickness, inches.....	.658	.605	.598
More Non-Skid Depth, inches.....	.281	.250	.250
More Plys Under Tread.....	6	5	6
Same Width, inches.....	5.20	5.20	4.75
Same Price.....	\$6.65	\$6.65	\$4.85

\*A "Special Brand" tire is made by a manufacturer for distributors such as mail order houses, oil companies, and others, under a name that does not identify the tire manufacturer to the public, usually because he builds his "best quality" tires under his own name. Firestone puts his name on EVERY tire he makes.

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