# South Dakota State University Open PRAIRIE: Open Public Research Access Institutional Repository and Information Exchange

Cooperative Extension Circulars: 1917-1950

SDSU Extension

1-1926

## Hog Lice and Hog Mange

G. S. Weaver

Follow this and additional works at: http://openprairie.sdstate.edu/extension circ

#### Recommended Citation

Weaver, G. S., "Hog Lice and Hog Mange" (1926). *Cooperative Extension Circulars:* 1917-1950. Paper 236. http://openprairie.sdstate.edu/extension\_circ/236

This Circular is brought to you for free and open access by the SDSU Extension at Open PRAIRIE: Open Public Research Access Institutional Repository and Information Exchange. It has been accepted for inclusion in Cooperative Extension Circulars: 1917-1950 by an authorized administrator of Open PRAIRIE: Open Public Research Access Institutional Repository and Information Exchange. For more information, please contact michael.biondo@sdstate.edu.

#### HOG LICE AND HOG MANGE

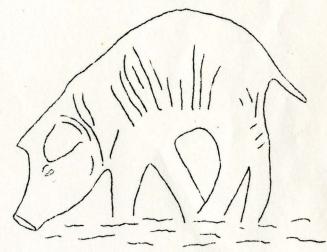
Бy

Dr. G. S. Weaver

Extension Specialist in Animal Diseases.

External Parasites of hogs cause an extensive loss to the hog industry. A hog that spends all of his time scratching instead of eating does not do well. These parasites set up such an irritation that the hog is constantly rubbing and he will not take on flesh rapidly. Hogs that are infested with external parasites do not sell well on the market because when they are butchered they are very hard to scrape. Furthermore, a No. 1 ham cannot be made from a mangy hog because it is necessary to take the skin off the ham.

Pig infested with external parasites showing general unthriftiness and wrinkled condition of the skin.

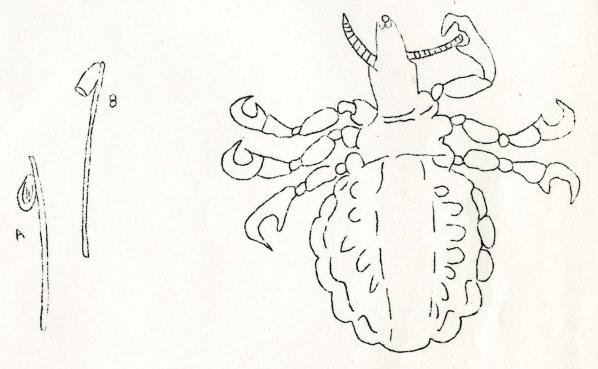


Hog Lice.

Only one species of lice infests hogs - that is, cattle lice will not stay on hogs. The lice obtain their food by puncturing the skin and sucking

Cooperative Extension Work, U. S. Department of Agriculture and South Dakota State College cooperating. Distributed in furtherance of Acts of May 8 and June 30, 1914. A. E. Anderson, Director, Brookings, S. Dak.

the blood. This causes an intense itching and the hogs rub violently against any convenient object. Frequent rubbing causes a loss of hair. Many of the lice are rubbed off on fence posts, etc., and wait for the next hog to rub. In this way the lice spread from one hog to another.



A - Nit or egg attached to bristle unhatched. B - Hatched.

The common hog louse.

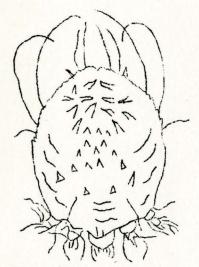
Thirty times natural size.

The hog louse is one of the largest of lice. The feet are adapted for clasping the hairs. The entire life cycle is passed on the hog. The female glues the eggs to the hairs. Each female lays about 90 eggs. These eggs hatch out in 12 to 14 days. The young female begins to lay eggs in about 12 days.

It so happens that the control for hog mange is effective for lice as well, so the details of control for lice will be given under hog mange.

#### Hog Mange.

Mange or scabies is caused by a mite. This mite is of the same family of bugs that causes scabies in other animals, but will not live on other species of animals. That is, a hog mite will not live on sheep. These mites are too small to see with the naked eye but can be seen with a strong magnifying glass. The common mange mite is known as the sarcoptic mite. These mites multiply very fast - a new generation appearing every 12 or 14 days. Each female mite will lay from 10 to 25 eggs. The mites dig holes in the skin and set up an intense itching.



Sarcoptic mange mite, magnified 100 times.

Mange usually starts around the head or nose but soon spreads over the sides and finally over the entire hog. Each mite makes a little pimple in the skin about the size of a pinhead.

These pimples increase in number by the thousands until large patches of the skin are covered. The skin becomes hard and dry and resembles a hard thick piece of leather. This condition is

sometimes spoken of as "elephant hide". The hair comes off due to the constant rubbing. The skin may break in places and blood coze out and form scabs. The hog loses flesh and in some cases may die as a result of this infestation.

Treatment for Lice and Mange.

It is not possible to poison these mites because they do not eat anything outside of the hot but get their living by digging holes in the skin. These parasites breathe through their body pores instead of through their

mouths or noses. If they are covered with oil, their breathing apparatus is shut off and they are smothered. Therefore, a thick oil that will not run off quickly, applied all over the hog at one time, will kill both lice and mites. This oiling of the hog will not kill the eggs and it is necessary to again oil the hog after these eggs hatch out. Since these eggs hatch out in 12 to 14 days, the second application of oil should be given in not less than 12 days nor more than 14 days after the first oiling.

#### Crude oils.

The genuine crude petroleum, just as it comes from the bil well and before it has been processed, is the most effective bil for treatment of lice and mange. It is better than any other preparation on the market. It has body enough to stay on the hog and has all the ingredients necessary to kill the parasites. The only drawback is the difficulty in obtaining small quantities. Barrel lots are very easily obtained by ordering through bil companies. Too many times fuel bil is sold as genuine crude bil. Crude bil is the cheapest and best in the long run.

Fuel oil is the residue or crude oil after the gasoline and other light hydrocarbons have been taken out. While not so effective it is a fair substitute. The action of fuel oil can be improved by the addition of one pint of kerosene to each gallon of fuel oil.

Other miscellaneous oils are used and many of them are good. Some of the numerous proprietary oils are good if they do not cost too much. Oil drained from crankcases has little value and is only worth using when it is obtained free. Crankcase oil may be improved somewhat by adding one pint of kerosene to each gallon. Axle-grease is too thick and too hard to apply.

#### Lime-Sulphur Dip.

Lime-sulphur dip is effective against hog mange but it not much good against lice. More applications are necessary than with the crude oil. The lime-sulphur dip is most effective when warm and the temperature of the dip should be kept from 95 to 100 degrees F. while hogs are being dipped. This treatment does not lend itself to hand application and it is necessary to have a dip tank for best results. Lime-sulphur can be bought already mixed and is better to buy it this way than to attempt to mix and cook it on the farm. Ready-prepared dips should be diluted and used according to the directions on the container.

### Coal-Tar Dip.

The principal ingredient in coal-tar dip is creosote oil. The common dips are made up of creosote oil, soap and water. Many of these dips are on the market under many different names. Coal-tar dip will kill lice but has very little effect on mange. The dipping solution may be used warm or cold according to conditions. It is necessary to dip the hogs twice, 12 to 14 days apart. The dipping solution should be made up according to directions on the container, usually a 3 to 5 percent solution.

#### Methods of Application.

The main thing to keep in mind with any kind of treatment is to cover the entire hog at one time. Any method is good if this is done. Hand treatment, spraying, hog oilers, hog wallows and dipping vats with their various limitations, are all used under varied conditions.

Hand application of a mange and lice treatment is satisfactory providing only a few hogs are to be treated. Crude oil is the best remedy to be applied by hand. Equal parts of cottonseed oil and kerosene may be used as a hand treatment or a mixture of kerosene and lard in the proportion of one-half pint of kerosene to one pound of lard is effective. The hog is

caught and held while the treatment is applied with a cloth or brush. A thin coat of oil should be applied all over the hog including inside of the ears.

Where dipping facilities are not available, the oil can be put on the hogs with a sprinkling can. It may be necessary to make the holes in the nozzle a little larger. A small pen should be cleaned out and heavily bedded with clean straw. Fill the pen with as many hogs as can stand in the pen. Sprinkle the oil over the backs of the hogs. Make a swab by wrapping a rag around the end of a stick and soak this swab in the oil. Lift up the ears of each hog and daub a little oil on the inside of the ears. Leave the hogs in the pen for an hour or so and it will be found that they will be pretty well covered with oil when they are turned out.

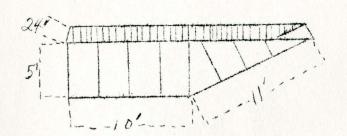
When spraying with coal-tar dip for lice, the same pen method may be used as the above. A common hand spray pump will serve the purpose. See that the dip is mixed according to directions and then wet the bags thoroughly. Repeat this operation in 12 to 14 days.

A hog oiler is good so far as it goes but it is hard for a hog to get oil all over himself with a hog oiler. A hog oiler will help to keep mange down to a certain extent (providing oil is kept in it) but to eradicate mange with a hog oiler is hardly possible. The roller type of hog oiler is preferable to the "shake down" type because the roller runs in oil and does not clog up as easily. Posts with rope or burlap wrapped around them are make shifts but serve a purpose if they are looked after.

Hogs wallows are unsanitary and sometimes unsightly. Even when properly made of concrete they are so seldom cared for that as a means of controlling

parasites they are not very satisfactory. The common practice of throwing oil in a mud wallow is a farce. A mud wallow has no place on any farm and should be drained and filled up. However, a concrete wallow has some merits. If it is properly constructed with a drain and if it is frequently cleaned out, a little oil poured on top of the water will help to keep down the lice and mange.

Dipping is the most effective method known for applying treatment to hogs for external parasites. Not many farms are equipped with dipping facilities but it would seem like more farms ought to be. Dipping tanks do not cost much and not a great deal of labor is necessary to construct them. Concrete tanks are more permanent and generally more satisfactory than other kinds. Plans for the construction of dipping tanks may be secured from South Dakota State College. Galvanized iron tanks may be bought in most any desired size. Wood or frame tanks are not very lasting.



Galvanized iron dipping vat with good dimensions.
Could be made with slight slope on the other end if desired.

The best location for a dipping tank is just outside of the hog house door so that the hogs may be driven directly into the dipping vat from the hog house. In some cases it may be necessary to make a special door. If a permanent tank is put in, a drain pen should be provided as this saves a lot of dipping solution.

If oil is used, fill the tank with water (soft water preferred) 36 in.

deep. Pour 6 to 8 inches of oil on top of the water. As the dipping progresses, more oil will have to be added from time to time. When lime-sulphur is used, the capacity of the tank will have to be figured and the correct amount of dip put in to make the proper solution. The same is true with coal tar dips when used for lice.

When the hogs are being dipped, they should be put clear under - head and all. The young pigs should be dipped separate from the old hogs to prevent accidents.

Young pigs may be dipped most any time on the farm. About the only equipment necessary is a barrel. Fill the barrel half full of water and pour 6 or 8 inches of oil on top of the water. Catch the pig by the hind legs and souse him in and the job is done.

External parasites cause a great loss to the hog industry.

Hog lice and hog mange are the two worst offenders.

Both parasites dig holes in the skin and irritate the hog.

These parasites cause a loss of flesh and a loss of profit.

Parasite multiply rapidly - a new generation every 12 to 14 days.

Treatment consists of smothering the parasites.

Crude petroleum is the best treatment for lice and mange.

Lime-sulphur dip will kill mange but has little effect on lice.

Coal-tar dip will kill lice but has little effect on mange.

Dipping is the best method of application.

Hand treatment is satisfactory in small bunches.

Hogs must be dipped at least twice, 12 to 14 days apart with any dip.

Reference: - U. S. Department of Agriculture Farmers' Bulletin No. 1085 
Hog Lice and Hog Mange.