

# External Parasites of Swine

by

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## *Hog Mange*

Hog mange occurs in all parts of the United States where hogs are raised. Hogs of all ages are susceptible but the younger animals are most seriously affected.

There are two types of mange, each caused by a different species of mite. The symptoms of each are clear and distinct.

## *Sarcoptic Mange*

Sarcoptic mange is caused by a small yellowish mite which is scarcely visible to the naked eye. The mites burrow into the skin, forming tunnels within which each female lays 10 to 25 eggs. The eggs hatch in three to ten days and the young mites reach maturity in 10 to 12 days. The burrowing of the mites causes skin irritations which usually first appear on the head and ears, then spread until the entire body may be covered. The coat of hair becomes rough, especially on the shanks and along the sides. In the later stages the skin becomes thickened, raw, scaly and wrinkled accompanied by loss of hair. The mange mite causes severe itching and hog producers usually receive their first warning of the appearance of the parasites by noting that the hogs are constantly scratching and rubbing on troughs, fences, etc. Close examination will reveal rough hair on the shanks and sides accompanied by reddish skin irritations on the tender skin under the belly and between the hind legs.

Sarcoptic mange mites multiply most rapidly during cold weather and the heaviest infestations occur during late winter and spring. Sarcoptic mange is very common in all parts of Texas and the parasite causes heavy losses in weight and thriftiness especially among the spring pig crop.

## *Demodectic Mange*

Demodectic or follicular mange is caused by a small worm-like mite which is about one-half the size of the sarcoptic mite. The mites penetrate the hair follicles and cause small, hard nodules or pimples to form. These nodules may grow to about one inch in diameter and often rupture, releasing a creamy-white, cheesy material. The pimples first appear about the head and spread backward over the rest of the body.

## *Hog Lice*

Only one species of louse attacks swine and this species is a blood-sucker. Severe infestations cause serious loss of flesh, poor feed utilization and general unthriftiness.

The hog louse is one of the largest known, reaching five or six mm in length and is bluish-gray in color. The lice feed mainly on the tender areas of the skin but may be found over the entire body. Hogs infested with lice scratch and rub a great deal.

Each female louse glues one to twenty eggs on a single bristle, laying up to 90 eggs over a 25-day period. The eggs hatch in 12 to 20 days and the young lice become active immediately. Maturity is reached in about 10 days.

## *Control of Mange and Lice*

Both hog lice and sarcoptic hog mange can easily be controlled by the use of either benzene hexachloride (BHC), lindane, or chlordane. These insecticides if properly used will eradicate mange and lice.

Benzene hexachloride should be used in the wettable powder form with a water diluent at a strength of .12 gamma in a spray.

Keep the mixture well agitated while spraying as the powder settles out rapidly. Benzene hexachloride should not be used on hogs that are to be slaughtered within thirty days of treatment as it may give the meat an offensive flavor. A dilution chart for BHC is shown below:

Percent Gamma BHC Wettable Powder Concentrate	Amount of BHC for Each 25 Gallons of Water
6% -----	4 <sup>1</sup> / <sub>4</sub> lbs.
12% -----	2 lbs.
25% -----	1 lb.
33% -----	12 oz.

Lindane, which is the pure gamma isomer of benzene hexachloride, may be used at a rate of one pound of 25 percent wettable powder to each 25 gallons of water.

Chlordane also gives good results against hog mange. Only the wettable powder should be used and the spray should contain .25 percent actual chlordane, or 1<sup>1</sup>/<sub>4</sub> pounds 40 percent concentrate in 25 gallons of water.

Demodectic mange is not easily controlled, but fortunately this type is not commonly found in Texas.

When hog mange or lice make their appearance on a farm, it is important that all

hogs on the farm be treated. In spraying hogs special attention should be given to the under side of the bodies, flanks, armpits, jowls, faces and ears. The spray should be directed to the inside of the ears as a few parasites will be located in this spot. One untreated square inch of skin anywhere on the hog may contain a hundred or more parasites or eggs and this is sufficient for reinfestation. If each hog on the farm is thoroughly soaked with a recommended spray of proper strength, one treatment should give complete control of both sarcoptic mange and lice. If reinfestation occurs the treatment should be repeated immediately. PRECAUTION: Due to the acute toxicity of these chemicals, it is important the recommended strength of the mixture used not be exceeded. Young pigs should not be treated until they reach weaning age.

Sanitation is an important factor in the control of parasites affecting hogs. The above described parasites do not reproduce off the body of the hog, but if they are dislodged they may remain alive in the bedding and litter for at least a month. For best results, all trash, straw and litter should be removed and the pens and houses should be kept clean. Care should be taken that no hogs infested with mange or lice are introduced into the herd.

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