Preventing and Treating Parasites in Hogs  
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Hog Parasites in General
- You probably wont have to worry about worms in hogs if you feed your pigs milk, raise only one or a few at a time and get them from a clean herd, leave your pen clean and empty for at least a couple of weeks between pig batches.
- Parasites are more of a problem in breeding stock, very young pigs, and animals kept over the winter.

Internal Parasites

<table>
<thead>
<tr>
<th>Parasite</th>
<th>Age Group affected</th>
<th>Symptoms and Damage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Threadworms (strongyloides)</td>
<td>Young piglets and Breeding stock</td>
<td>Moderate to severe bloody diarrhea in piglets</td>
</tr>
<tr>
<td>Whipworms (strongyle)</td>
<td>Weanling piglets</td>
<td>Bloody diarrhea from ulcerated cecum or intestine</td>
</tr>
<tr>
<td>Nodular Worms (strongyle)</td>
<td>All ages</td>
<td>Nodule formation decreases digestive efficiency.</td>
</tr>
<tr>
<td>Stomach Worms (strongyle)</td>
<td>All ages</td>
<td>Irritates lining of the stomach resulting in diarrhea</td>
</tr>
<tr>
<td>Lungworms (strongyle)</td>
<td>Feeder pigs</td>
<td>Irritates air passages causing bleeding and predisposes to pneumonia.</td>
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<tr>
<td>Large Roundworms (ascarid)</td>
<td>Weanlings and feeder pigs</td>
<td>Migrating larvae damage liver and lungs predisposing to pneumonia and diarrhea. Causes liver condemnation at butcher.</td>
</tr>
<tr>
<td>Kidney Worms (Stephanurus sp.)</td>
<td>Breeding stock</td>
<td>Damages liver, perirenal tissues, ureters, and kidneys.</td>
</tr>
<tr>
<td>Coccidiosis</td>
<td>Suckling piglets</td>
<td>Ruptures intestinal mucosa causing diarrhea and poor digestion.</td>
</tr>
<tr>
<td>Leptospirosis</td>
<td>Breeding stock</td>
<td>Infestation of the liver and kidneys cause little clinical signs but results in abortion and/or weak piglets. There is a vaccine for use in breeding stock that is Allowed.</td>
</tr>
</tbody>
</table>

- Most worms are transmitted via eggs from infected pigs dung.
- Some worm eggs such as strongyles can survive for months on pasture but usually die out on dry surfaces exposed to the sun.
- A good assessment of your ascarid levels is the quality of butcher hogs’ livers.
- Low levels of worms like ascarids usually do little harm and may actually stimulate the development of a mild immunity.

External Parasites

<table>
<thead>
<tr>
<th>Parasite</th>
<th>Age</th>
<th>Signs</th>
<th>Symptoms and Damage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lice</td>
<td>All ages</td>
<td>Large, dark louse found on the skin</td>
<td>Suck blood through the skin causing</td>
</tr>
</tbody>
</table>
flanks and ears. Pigs are constantly rubbing and lose patches of hair.

irritation and itching. May decrease feed intake in growing pigs and anemia in young piglets.

Mange  All ages  Microscopic mites burrowing under the skin.

Mite activity increases skin temperature to rise causing itching. Results in raised areas of the skin covered with brown scabs around ears and necks.

Flies  All ages  Stable flies on walls and unfinished feed. Face flies and deer flies on animals.

All fly movement can spread disease. Flies landing on animals can cause eye irritation and unrest. Fly strike is a possibility for sick or recently castrated pigs.

Prevention
This says it all…..
I have given much thought to the inclusion of pigs in this book, but I have decided against it. Quite apart from religious beliefs inherent through my Turkish ancestry, where the pig is strictly prohibited as food for man, being considered as unclean and a potent source of disease to the human race, I know very surely that the animal will not easily respond to disease treatment by herbal methods. It is ill advised to proffer natural remedies for animals being reared habitually on an entirely unnatural diet, cooked foods being fatal to whole health, and breeding disease faster even than sour earth. The modern basic diet of the pig is boiled household swill from the refuse bins. It is prevented from feeding naturally by confinement and by the ringing of the nose. The animal is made by man internally filthy, and no herbal treatments are going to expel worms readily from intestines which are clogged with the mucus deposits resulting from unnatural diet, nor will herbs easily penetrate tissues clogged with fat and toxins from the same causes……and when pigs are allowed to live a natural life, free range exercise and rooting for their food, there is no reason why herbal medicine should not keep them in excellent health or restore them when sick.

Juliette de Bairacli Levy, The Complete Herbal Handbook for Farm and Stable

Internal Treatments
For the hogs:
• Feed mugwort, wormwood (use caution), or tarragon (Artemesia)* A (if Organic)
• Feed goosefoot or epazote seed (Chenopodium) A (if Organic)
• Feed raw garlic as sulfur prevents eggs from developing into larvae* A (if Organic)
• Feed conifers ad lib* A (if Organic)
• Offer herbs and vegetables such as carrots, pumpkins, tansy, raspberries, elder, and lupine* A (if Organic)
• Hydrogen peroxide in water A
• Diatomaceous earth (DE) up to 2% in feed A
• Homeopathic remedies (see below) A

Piglet health greatly improves outdoors. Ranging sows stay fit & have healthy litters. All pigs should have access to wild herbs.
• Deworm before season changes or before dry or cold periods* A
• Deworm during the new moon when worms are most active A
• Precede worming with a fasting period and follow with a laxative diet* A

Aromatic herb cuttings are good bedding. Take wild plants and twigs to confined pigs. Harvesting herbs for the sows.

**External Treatments**

For the hogs:
• Aromatic oils such as citrus, eucalyptus, citronella, lavender, rosemary *R
• Fly spray made of 1 cup vegetable oil, 2 cups vinegar, 1 cup water and 1 Tsp essential oil R
• Herbal dusts or rubs A (if Organic) R (if non-organic)
• DE applied to skin or barn surfaces R
• Neem oil* R
• Pyrethrum dust or fly spray R (parasiticides with piperonyl butoxide are P)
• Copper sulfate dust R
• Maintain mud wallows* A
• Keep a closed herd or bring in only select animals* A

For the land or buildings:
• Fly paper and fly traps* A
• Aromatic bedding such as cedar chips, herbs, and conifer needles* A
• Lime floors and other surfaces* A (ground limestone) R (hydrated lime)
• Compost manure and bedding to kill parasite eggs* A
• Intensive rotational grazing management to decrease exposure to parasites* A
• Multi-species grazing with poultry to remove parasite eggs from dung* A
• Reduce single species animal density* A
• Improve drainage of pastures and dry lots* A
• Plant mustards and marigolds to reduce roundworm populations A

*Used successfully for hogs on Kingbird Farm

A=Allowed  R=Restricted  P=Prohibited  OMRI Generic Materials List & NOP Rule

Deep, composting bedding kills worm eggs. Rotate pastures & expose pigs to wild plants. Bright, comfortable housing improves health.
Homeopathy
- Homeopathic remedies do not actually act as vermicides.
- The theory behind homeopathic worming is based on the belief that these remedies, while not actually killing worms, will render the stomach and intestinal tract unsuitable for the establishment or development of worms.
- George Macleod recommends first to employ a conventional wormer and to follow this with remedies such as KAMALA, GRANATUM, CHENOPODIUM, and TEUCRIUM.

Ivermectin
This parasiticide is **Prohibited** for use in slaughter stock, but **Restricted** for use in breeding stock. It is allowed in emergency treatment for dairy and breeder stock when organic system plan-approved preventative management does not prevent infestation. In breeder stock, treatment cannot occur during the last third of gestation if the progeny will be sold as organic and must not be used during the lactation period of breeding stock.

Karma’s Louse Oil
- 3.8 L mineral oil (Restricted)
- 30 ml lemon essential oil (general EPA #8022-96-6)*
- 30 ml white camphor essential oil (general EPA #8022-96-6)
- 30 ml rosemary essential oil (EPA #8000-25-7)
- 30 ml lemon grass essential oil (EPA#8007-02-1)
- 30 ml eucalyptus essential oil (general EPA#8022-96-6)
- 15 ml citronella essential oil (EPA #8000-29-1)
- 15 ml lavender essential oil (EPA #8022-15-9)

*Use of essential oils is Restricted and must be EPA registered if used as a parasiticide.

**Directions:** Apply oil with squeeze bottle starting at the top of the head and running along the topline to the base of the tail. Apply and massage in extra oil to hot spots such as behind the ears, inside the ears, and under the flank. Do not get this oil in the eyes, nose, mouth, or other mucus membranes. Repeat at 14-21 days. I prefer mineral oil because pigs don’t lick it off each other, it doesn’t go rancid or freeze, and it smothers lice.