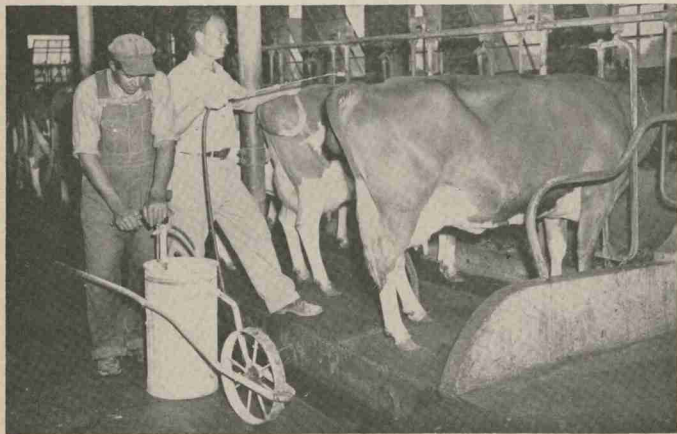


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CONTROL OF LIVESTOCK PESTS

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Pesticide Handbook

CONTROL OF LIVESTOCK PESTS

GEORGE D. JONES

PEST	MATERIAL	DOSAGE	REMARKS
Cattle Grubs	Rotenone	Use ready-made dust mixture containing approximately 1.65% total rotenone content. Make 3 applications at 3-4 week intervals.	Make first application soon after grubs or "bumps" first appear underneath skin on back region. Rotenone may also be used as a spray, wash or dip. For more details see USDA, Farmers' Bulletin No. 1596.
Cattle Lice Dairy (animals giving milk)	Dust Rotenone	Same dust as above for group for grub control but begin application in October and make 2 applications at 2 week intervals.	Rub well into flanks, neck and all infested areas. Preferably in fall when certain animals usually are more heavily infested.
	Sprays Methoxychlor, 50% wettable powder. Lindane, 25% wettable powder	Spray using 1 lb. 50% wettable powder to 5 gal. water. A single spray using only 1 to 1½ oz. (2 to 3 level tablespoonfuls) to 5 gal. water may be used.	Apply thoroughly with small spray equipment (knapsack or foot pump) using about 1 pint per animal. Repeated applications are not advisable due to harmful absorption.
Beef (animals not giving milk)	Dust Rotenone or Methoxychlor	Rotenone dust as above or a 5% methoxychlor dust may also be used on animals giving milk or ready for market when there is danger of using DDT.	Same as above. One application in late fall usually sufficient. Two applications at a month interval may be necessary to clean up heavy infestations. When power equipment is used, reduce amount of DDT to ¼ lb. to 5 gal. water.
	Sprays DDT, 50% wettable powder	Spray using 1 lb. 50% wettable powder to 5 gal. water.	
	Lindane (essentially 100% Gamma Isomer of BHC, 25% wettable powder)	A single spray using only 1 to 1½ oz. (1 to 1½ tablespoonfuls) WP per 5 gal. water has proved effective but re-infestation may occur after 2 weeks.	Follow company recommendations carefully as this dosage may be harmful to very young animals.
	Toxaphene, 40% wettable powder (Do not use on young animals)	Use ½ lb. 40% wettable powder to 5 gal. water.	Chlordane, like toxaphene, should not be used on dairy or on young animals. Do Not Use Oil Sprays. Follow company recommendations carefully.
	Chlordane, 50% wettable powder	Same as for toxaphene.	
House Fly (Buildings)	Pyrethrum or allethrin with added synergist or thanite	Close doors and windows and apply as space or "fog" spray.	Fly breeding areas should be located and cleaned regularly.
	Bait mixtures containing malathion, Diazinon, and L-13/59	Certain fly "bait" mixtures have been used by sprinkling on sacks on the floor and as "dry baits" to kill resistant populations.	Follow directions on labels. Diazinon not recommended for use in dairy barns (2).
	Malathion or Diazinon (2) wettable powder	Apply as a spray using 1 lb. to 2½ gal. water.	Emulsions of these products may also be used. Follow directions on labels.
	Methoxychlor, 50% wettable powder or 25% emulsion	Use 1 lb. WP or 1 pint emulsion to each 2½ gal. water.	Mix with small amount of water before putting in sprayer. Apply to light cords, cross beams and all areas where flies are known to stay. Apply with small or power sprayer.
	50% DDT wettable powder or emulsion concentrates	See Methoxychlor above and according to directions on container.	

Control of Livestock Pests—(continued)

PEST	MATERIAL	DOSAGE	REMARKS
Household Fly (cont'd)	Chlordane 50% wettable powder	1 lb. to each 3 gal. water.	Same as above and follow directions on container. Avoid contaminating feed and food. DDT and chlordane are not to be used in dairy barns but may be used in many areas where flies are not resistant.
	Lindane, (1) 25% wettable powder or 20% emulsion	8 oz. (8 to 10 level tablespoonfuls WP) or 1½ cupful emul. to each 5 gal. water.	
Hornflies (3) (Dairy animals giving milk)	Methoxychlor, 50% wettable powder	Spray using 1 lb. to 5 gal. water.	Apply to legs and underneath portions as well as over back and around horns.
	Pyrethrum or allethrin with added synergist and water to make spray	Effective for short periods, from 2 to 4 days. (May be used in 3 gal. sprayer.)	Oil sprays if not applied properly will harm skin. Follow company recommendations.
Hornflies (3) (Beef and animals not giving milk)	DDT 50% wettable powder	Spray using 1 lb. to 5 gal. water and thoroughly wet animals.	Same as above on dairy animals. Power spray equipment will speed up control work. When power equipment is used reduce DDT to ½ lb. to 5 gal. water.
	Methoxychlor, 50% wettable powder	As above.	Follow company recommendations.
	TDE, 50% wettable powder	Same as for DDT.	
	Lindane, 25% wettable powder	Use 1 to 1½ oz. (2 to 3 level tablespoonfuls) WP per 5 gal. water.	Follow company recommendations. (This product does not give long residual action.)
	Toxaphene, 40% wettable powder	Use ½ lb. to 5 gal. water.	Follow company recommendations.
Deer, horse and stable flies	(3) Pyrethrum and piperonyl Butoxide	Same as above on dairy animals.	(3) May protect animals for short periods. Stable flies difficult to control. Residual sprays to buildings (see House fly) may be helpful.
Poultry Mite (in building)	Lindane, 25% wettable powder	2 to 2½ oz. (4 to 6 level tablespoonfuls) to each 1 gal. water. Apply thoroughly to nests, roosts, cracks and crevices.	Carbolineum, creosote, crude oil and kerosene may also be used.
	DDT (5% in kerosene spray)	Apply thoroughly to roosts, cracks and crevices.	
Mites (In litter)	No control needed. Mites may be scavengers or predacious on insects or other mites		In laying houses with no roosts avoid use of materials in litter.
Lice	Sodium flouride	1 oz. to 1 gal. water.	Apply as dip.
	DDT, 5% dust or sodium flouride	Apply as "pinch" method or dust.	Lindane and nicotine sulphate also may be used as roost paint.
Sheep Tick and Lice	DDT 50% wettable powder	1 lb. to 25 gal. water as a dip.	If no dipping vat is available, increase DDT or chlordane to 2 lbs. to 25 gal. water and apply as spray.
	Chlordane 50% wettable powder	Same as for DDT.	
	Lindane (25% wettable powder)	Same as for Cattle Lice (Beef animals).	Spraying is best done during summer and fall months while wool is short.
	Rotenone dipping powder (Same as for screw worm below)	Follow directions on container.	
"Fleece" worms	DDT, 50% wettable powder	Use 1 lb. DDT to 5 gal. water plus 1 oz. lindane to each 5 gal. water.	Treat about every 3 weeks during periods of heavy tick activity. (May-June and Aug.-Sept.)
	Lindane 25% wettable powder		
Ticks (other than brown dog tick) (All animals except milk cows)	Toxaphene, 40% wettable powder	Same as for Cattle Lice.	Follow company recommendations. (Do not use on young animals.)

Control of Livestock Pests—(continued)

PEST	MATERIAL	DOSAGE	REMARKS
Brown Dog Tick (Kennel and household pest)	5% DDT or 5% chlordane powder	Dust into cracks and crevices.	Use sparingly as needed. Dips or sprays containing rotenone may be used on animals. Do not apply to animals.
	5% DDT or 2% chlordane household spray	Spray into cracks and crevices.	
Screwworm (Watch out for localized breaks)	Smear No. 62 or new USDA formula. Smear No. 335. (Treat all wounds during the entire season)	Pack wood if necessary.	Northward movement of infested animals can cause outbreaks. See DDT sprays for suggestions as to spraying building to protect animals.
Hog Lice	DDT 50% wettable powder	Same as for control of lice on beef animals.	Apply with sprinkling can or sprayers. Toxaphene or chlordane are also effective.
Mange	Lindane 25% wettable powder	Same as for control of lice on beef animals.	
	Lindane, 25% wettable powder or	Use 3 oz. (4 to 6 level tablespoons) to each 5 gal. water.	Applied thoroughly as a single application may be sufficient. (U.S.D.A. Farmers' Bulletin No. 1085)
	Chlordane 50% wettable powder	4 oz. to each gal. water.	
Fleas (Barns)	DDT, 50% wettable powder or 25% emulsion or chlordane 50% wettable powder	Mix 1 lb. wettable powder or 1 cupful of emulsion to each 2½ gal. water. (See discussion on fly control in buildings as some of materials listed may also be used.)	Thoroughly spray walls and bedding of infested areas. One application usually sufficient. Sprays used to control lice on animals may be used but residual strength will give longer protection.
Fleas (On animals) Dogs Cats	Rotenone	Same as for control of brown dog tick. Use .75 to 1.65% dust.	Rotenone and pyrethrum powder may also be used. Commercial dips may also be available. Follow directions.

(1) Do not use where milk is handled.

(2) Diazinon not recommended for use in dairy barns. "Dry" baits made with malathion, diazinon and L-13/59 are not recommended for use in homes or where food is handled.

(3) A pyrethrum emulsion concentrate mixture used as a spray in a chute offers some relief from several biting flies. Information will be sent upon request. Also, home made rubbing devices are under study. They have proved effective under some conditions. Proper location is very important.

