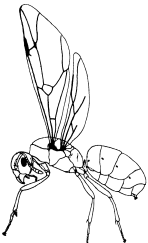

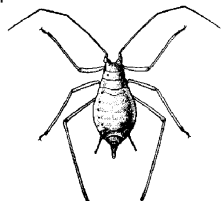


Control Measures for Household and Structural Pests

Pesticides listed all have current EPA registration. Refer to the label for proper site of application whether indoors or outdoors. For example, if the label lists ticks as an outdoor pest, the pesticide cannot be used indoors on this pest. Always refer to the label for proper mixing directions and safety precautions. Federal regulations allow for use of a pesticide at concentrations less than label rates. State regulations may supersede. The choice between wettable powder, soluble powder, oil solution, emulsifiable concentrate, microencapsulation or aerosol for indoor use or wettable powder, soluble powder, and emulsions for outdoor use depends on the type surface and habitat to be treated. Select the pesticide carefully to avoid damage to carpets, fabrics, plants, etc. Non-chemical methods should be used whenever practical. The following table provides illustrations of common household and structural pests, pesticides, pesticide dosages, method of application and remarks. Pests are listed in alphabetical order. **Both common and trade names are given in this bulletin to help the homeowner recognize various names of pesticides. In no way does this endorse one product over another.** Compounds are listed in alphabetical order, not in order of preference.

Pests	Pesticide	Actual Chemical Wanted		Method of Application	Remarks
		Spray	Dust		
 <p>(length, 1/6 to 3/4")</p>	acephate (Orthene)	0.5 to 1%	—	Indoors: Paint or spray cracks and crevices of baseboards, door frames and window sills especially ant trails. Dust behind baseboards in inaccessible areas. Outdoors: Sprinkle dust or spray in nest openings, around foundations, across door strips, and places frequented by ants.	Non-chemical control: Eliminate food materials attracting ants into the home. Follow good sanitary practices. Do not treat entire walls or floors. Use on limited areas only . Do not use sprays or dusts in places where children or pets may become exposed. If necessary, replace timbers damaged by carpenter ants .
	ammonium phenate bromide (Microban)	0.69%	—		
	amorphous silica gel (Drione, Tri-Die)	4%	40%		
	^F bendiocarb (Ficam)	0.1 to 0.25%	1%		
	^F bendiocarb + pyrethrins (Ficam Plus)	0.25 to 0.5%	—		
	boric acid (Borid)	—	99%		
	borate (^C Bora-Care, Drax, Mop-Up, Niban, Perma-Dust, Tim-Bor)	5.0 to 99.4%	—		
	carbaryl (Sevin)	2%	5%		
	^F chlorpyrifos (Duration, Dursban, Empire, Engage, Killmaster II, Tenure)	0.25 to 0.5%	—		
	chlorpyrifos + pyrethrins (Dual Use)	0.25 to 0.5%	—		
	^C cyfluthrin (Optem, Tempo)	0.05 to 0.1%	0.1%		
	^C cypermethrin (Cynoff, Cyper-Active, Demon, Vikor)	0.1 to 1%	—		
	d-phenothrin (Steri-Fab)	0.23%	—		
	[*] deltamethrin (Suspend)	0.03%	—		
	diatomaceous earth (Answer, Organic Plus)	—	83.6 to 90%		
	diatomaceous earth + pyrethrins (Organic Plus)	—	90% + 0.2%		
	diazinon (Knox Out)	0.5% to 1%	—		
	esfenvalerate (Conquer)	0.027 to 0.05%	—		
	^T fenvalerate (Tribute)	0.1 to 0.2%	—		
	^T fluralinate (Mavrik, Yardex)	0.009 to 0.019%	—		
	[*] lambda-cyhalothrin (Commodore)	0.03%	—		
	^{FT} permethrin (Astro, Dragnet, Flee, Prelude, Torpedo)	0.5% to 1%	—		
	[*] propetamphos (Safrotin)	0.5 to 1%	—		
	propoxur (Baygon)	0.5 to 1.1%	2% bait		
	pyrethrins (Exciter, Kicker, Microcare, Pyrenone, Pyrethrum, Safer, Synerol, Uld, X-Clude)	0.0125 to 3.5%	1%		
	resmethrin (Vectrin)	3%	—		
	sulfuramid (Pro-Control)	—	0.5% bait		
	[*] tralomethrin (Saga)	0.03 to 0.06%	—		
trichlorfon (Larva-Lur)	—	5% bait			
 <p>(length, 1/16")</p>	boric acid (Drax)	—	2.0 to 99% bait	Indoors: Use bait placement only where ant trails are found. Bait preference may change during the season. Boric acid plus mint apple jelly (2 table-spoons boric acid + 10 oz. jelly) is an effective bait.	Non-chemical control: If pesticide use is prohibited around high-tech equipment and health areas, use sticky tapes, double face tapes, petroleum jelly, etc. In winter, ants are near heat sources; in summer, distributed throughout.
	hydramethylnon (Maxforce)	—	5% gel bait		
	methoprene (Pharoid)	—	1% bait		
	propoxur (Baygon)	—	10% bait		
	sulfuramid (Pro-Control)	—	2% bait		
 <p>(length, 3/32")</p>	^F chlorpyrifos (Dursban)	0.5%	—	Indoors: Use pyrethrins plus piperonyl butoxide aerosol to knock down and kill aphids. Outdoors: Spray at windows, doorways, and other points of entry.	Non-chemical control: Maintain good, tight window and door screens. These aphids are especially troublesome in late fall. For persistent problems, removal of willow trees close to the home has been reported effective. Willow trees may be sprayed with a dilute spray of diazinon, Dursban or Orthene.
	diazinon	0.5%	—		
	pyrethrins	0.1% to 0.3%	—		

^C Carpenter Ants Only
^F Some formulations are Restricted Use, see label for details.
^T Outdoor Use Only
^{*} Restricted Use

Follow label directions