Government of India
Ministry of Agriculture & Farmers Welfare
Department of Agriculture, Cooperation & Farmers Welfare
Directorate of Plant Protection, Quarantine & Storage
Central Insecticide Board & Registration Committee N.H.-IV,
Faridabad-121 001 (Haryana)

MAJOR USES OF PESTICIDES

(Registered under the Insecticides Act, 1968)

(UPTO - 31/01/2020)

(Based on certificate issued)

Disclaimer: The document has been compiled on the basis of available information for guidance and not for legal purposes.

INSECTICIDES

Approved Uses of Registered Insecticides

(As on 31/01/2020)

Agricultural Use					
Crop	**Common Name of the pest**	**Dosage/ha**			**Waiting Period (days)**
		a.i (gm)	**Formulation (gm/ml)**	**Dilution in Water (Liter)**	
Abamectin 01.90% EC					
Rose (Ornamental)	Red spider mites (*Tetranychus urticae*)	0.00048-0.00096%	0.025-0.050%	500	03
Grapes	Mites	0.014/L	0.75 ml/L water	500-1000	03
Acephate 75.00% SP					
Cotton	Jassids	292.00	390.00	500-1000	15
	Bollworms	584.00	780.00	500-1000	15
Safflower	Aphids	584.00	780.00	500-1000	15
Rice (Paddy)	Yellow stem borer, Leaf folder, Plant Hoppers, Green leaf hopper	500.0-750.0	666.0-1000.0	300-500	15
Acephate 97.00% DF					
Cotton	Jassids & Boll worm complex	436.50 -582.00	450.0-600.0	500	48
Paddy (Rice)	Yellow stem borer, Leaf folder, Plant hoppers, Green leaf hopper	727.50	750.00	500	21

Acephate 95.00% SG					
Rice (Paddy)	Yellow stem borer, Leaf folder, Brown plant hopper	562.50	592.00	500	30
Acetamiprid 20.00% SP					
Cotton	Aphids, Jassids	10.00	50.00	500-600	15
	Whiteflies	20.00	100.00	500-600	15
Cabbage	Aphids	15.00	75.00	500-600	07
Okra (Bhindi)	Aphids	15.00	75.00	500-600	03
Chilli	Thrips	10.00-20.00	50.0-100.0	500-600	03
Rice (Paddy)	Brown plant hopper	10.00-20.00	50.0-100.0	500-600	07
Alphacypermethrin 10.00% EC					
Cotton	Boll Worms	15.00-25.00	165.0-280.0	600-1000	07
Alphacypermethrin 10.00% SC					
Cotton	Boll Worms	25.00-30.00	250.0-300.0	500-1000	10
Name of Commodity	**Common name of the pest**	**Dose**	**Exposure Period**		**Aeration Waiting period**
Aluminum Phosphide 56.00% (3g Tablet, 10g Pouch)					
Stored Whole Cereals and Seed Grains Millet, Pulses Dry Fruits, Nuts Spices & Oil Seeds	Rice Weevil (*Sitophilus oryzae*), Lesser Grain Borer, Khapra Beetle (*Trogoderma granarium*), Rust Red Flour Beetle, Saw Toothed Grain Beetle, Caddle Beetle, Drug Store Beetle, Cigarette Beetle, Pulse Beetle	03 tablets (03 gm) per ton or 150 gm per 100 m^3 or 10 gm Pouch Per ton of commodity or 150 gm per 100 m^3.	Minimum 05 Days (*Sitophilus oryzae*) or 07 Days (*Trogoderma granarium*)		One hour of partial aeration in case non-polyethylene packed commodities allowed by 6-8 hrs. of full aeration. For polyethylene packed commodities minimum aeration period

				is 48 hrs. The waiting period for the release of stock is 48hrs in both the cases. Recommendation for bag stock 15 days.
Mild Products: De-oiled Cakes, Rice Bran Flour, Grain Animal & Poultry Food Split Pulses (Dal) & other Processed Food	Long Headed Floor Beetle, Coffee Borer, Dried Fruit Beetle, Flat Grain Beetle, Carpet Beetle	03 tablets/10 gm per ton or 225 gm/100 m^3	05 days	Aeration is waiting Period 07 days to be checked PH^3 detector strips.
Empty Godowns & Sheds	Rice Moth, Almond Moth, Mites, Fruit Fly, Granary Weevil, Caddle or Flour worm, Red Flour Beetle, Indian Meal Moth, Larger cabinet Moth, Wheat Kernel Damage in the field Cockroach.	14 tablets/1000 m^3 or 150 gm/100 m^3 or 4 pouch 10 gms each/1000 CFT or 150 gm/100 m^3	72 hrs.	Aeration Period 24 hrs detectors trips or phosphine detect tubes should be used in the premises to signal safety of atmosphere.
Rodents Burrows	Rodents	01 Tablet / Burrow	-	-
Aluminum Phosphide 15.00% (12g Tablet)				
Stored whole cereals and seed grains.	Rice weevil, Rust red flower beetle	1 tablet (12 g) per ton or 600 100 m^3	Non polythene Packed commodities: Partial-1 hour. Full-(6-8) hour. Polythene Packed commodities: Minimum 48 hrs.	07-14
Millets, pulses, dry fruits, nuts, spices & oilseeds (Air tight cover or	Lesser Grain Borer, Khapra Beetle, Saw Toothed Grain Beetle, Rice Moth,	900 g/100 m^3	-	05

godowns)	Almond Moth				
Milled products: De-oiled cakes, Rice bran	Rust red flower beetle	3 tablets/ton	48 hrs.		05
Flour Suji meals and Crushed grain (Animal & poultry feed), Split Pulses Dals)	Saw Toothed Grain, Beetle , Rice Moth, Almond Moth, long headed flour beetle & Mites	900 g/100 m3	48 hrs.		03
Other processed food and Empty Godowns & Sheds (under air tight condition)	All insect pests.	14 tablets/1000 tons or 600 g/1000 m^3	48 hrs. 24 hrs.		03
Aluminium Phosphide 77.50% GR					
Stored Grain	Red Rust Flour Beetle, Lesser Grain Borer, Rice Weevil, Khapra Beetle	3.35 gm	07 days		24 hours
Aluminum Phosphide 06.00% Tablet					
Crop & Non-Crop area	Field rodents	0.72 g a.i./burrow	One tablet of 12 gm/burrow		-
Azadirachtin 0.15% EC w/w Min. Neem Seed Kernel Based					
Cotton	White fly, Bollworm	-	2500-5000	500-1000	05
Rice (Paddy)	Thrips, Stem borer, Brown plant hopper, Leaf folder	-	1500-2500	500	05
Azadirachtin 00.30% EC (3000 PPM) Min. Neem Seed Kernel Based					
Cotton	American bollworm	-	4000.0	1000	05
Azadirachtin 01.00% EC Min. Neem Based					
Tea	Thrips	-	4000-5000	450	01
	Red spider mites	-	4000-5000	600	01

Azadirachtin 01.00% EC (10000 PPM) Min. Neem Based					
Tomato	Fruit borer (*Helicoverpa armigera*)	-	1000-1500	500	03
Brinjal	Fruit and Shoot borer (*Leucinodes orbonalis*)	-	1000-1500	500	03
Azadirachtin 00.03% EC Min. Neem Oil Based					
Cotton	Bollworm (*Helicoverpa armigera*), Aphids	-	2500-5000	500	05
Rice (Paddy)	Leaf folder, Yellow stem borer, Brown plant hopper	-	2000.0	1000	05
Azadirachtin 00.03% WSP (300 PPM) Neem Oil Based					
Bengal Gram (Gram or Chickpea)	Pod borer (*Helicoverpa armigera*)	-	-	-	07
Red Gram (Tur or Arhar)	Pod borer (*Melanagromyza* sp.)	-	2500-5000	500-1000	07
Cotton	Aphids, Jassids, Whitefly, Bollworms	-	2500-5000	500-1000	07
Okra (Bhindi)	Fruit borer, Whitefly, Leaf Hopper	-	2500-5000	500-1000	07
Brinjal	Shoot & Fruit borer, beetles	-	2500-5000	500-1000	07
Cabbage	Aphids, Diamond back moth, Cabbage worm, Cabbage looper	-	2500-5000	500-1000	07
Jute	Semi looper, Hairy caterpillar	-	2500-5000	500-1000	07

Azadirachtin 05.00% w/w Min. Neem Extract Concentrates					
Tea	Caterpillar, Pink mite, Red spider mites, Thrips	-	200.0	400	05
Tobacco	Tobacco caterpillar, Aphids	-	200.0	400	05
Rice (Paddy)	Brown plant hopper, Leaf folder, Yellow stem borer	-	200.0	400	05
Cotton	Whitefly, Leaf hoppers, *Helicoverpa armigera*, Aphids	-	375.0	750	05
Cauliflower	Spodoptera, Diamond back moth, Aphids	-	200.0	400	05
Bhindi (Okra)	Leafhopper, whitefly, Aphid, Pod borer	-	200.0	400	05
Tomato	Aphids, Whitefly, Fruit borer	-	200.0	400	05
Bacillus thuringiensis* var. *galleriae					
Cabbage & Cauliflower	Diamond back moth (*Plutella xylostella*)	-	06-1.0	500	-
Tomato	Fruit borer (*Helicoverpa armigera*)	-	1.0-1.5	500	-
Bhindi (Okra)	Fruit borer (*Earias* spp.)	-	1.0-1.5	500	-
Chilli	Fruit borer (*Spodoptera litura*)	-	1.5-2.0	1000	-
Cotton	Bollworm (*Helicoverpa armigera*)	-	2.0-2.5	1000	-

Rice (Paddy)	Leaf folder (*Cnaphalocrocis medinalis*)	-	1.0-3.0	1000	-
Bacillus thuringiensis* var. *kurstaki					
Cotton	Bollworm	-	750-1000	750-1000	-
***Bacillus thuringiensis* serovar *kurstaki* (3A, 3B, 3C) 05.00% WP**					
Cotton	American Bollworm	25.0-50.0	500-1000	500-1000	-
	Spotted Bollworm	37.5-50.0	750-100	500-1000	-
Red gram	Pod Borer	50.00-62.50	1000-1250	500-1000	-
Cabbage	Diamond back moth	25.00-50.00	500-1000	500-1000	-
***Bacillus thuringiensis* var. *kurstaki*, serotype H-39, 3B, Strain Z-52**					
Cotton	Bollworms, *Spodoptera*	0.75-1.00	500-750	-	-
Rice (Paddy)	Stem borer & Leaf folder	1.50	500-750	-	-
Gram	*Heliothis* sp.	0.75	500-750	-	-
Pigeon Pea	*Heliothis* sp.	0.75	500-750	-	-
Soybean	*Spodoptera, Heliothis, Spilosoma,* Semilooper, Leaf miner	0.75	500-750	-	-
Tobacco	*Spodoptera, Heliothis*	1.50-2.00	500-750	-	-
Castor	Hairy caterpillar, *Achaea janata*	1.00	500-750	-	-
Teak	Defoliator (*Hyblaea puera*), Skeletonizer (*Eutectona machaeralis*)	0.25-0.50	500-750	-	-

Barium Carbonate					
Godowns, Residential Premises Public halls	Rats, Mice, Field Rodents	10-20% Technical material to be mixed with bait	-	-	-
Beta-cyfluthrin 02.45% SC					
Cotton	Bollworm	12.5-18.75	500.0-750.0	500-1000	20
Beauveria bassiana 01.15% WP					
Cotton	Bollworm	-	2000	400	-
Rice (Paddy)	Leaf folder	-	2.50 kg/ha	750-850	-
Beauveria bassiana 01.00% WP, Strain NBRI-9947					
Chick pea	Pod borer	-	03.0 kg	500	-
Beauveria bassiana 10.00% SC					
Cabbage	Diamond back moth	1-1.5	-	500-750	-
Beauveria bassiana 01.15% WP					
Chickpea	Gram pod borer (*Helicoverpa armigera*)	-	2500	500	-
Beauveria bassiana 01.15% WP, Strain No. IPL/BB/MI/01					
Okra (Bhindi)	Fruit borer / Spotted bollworm	-	3.75-5.0 kg	400-500	-
Benfuracarb 03.00% GR					
Rice (Paddy)	Yellow stem borer, Leaf folder, Brown plant hopper	1000	33000	-	20
Benfuracarb 40.00% EC					
Red gram (Tur or Arhar)	Pod borer	1000	2500	500	20

Bifenazate 50.00% WP					
Rose	Two Spotted Mite (*Tetranychus urticae*)	375	750	3000	-
Bifenazate 22.60% SC					
Rose	Two Spotted Mite (*Tetranychus urticae*)	120	500	2000	-
Bifenthrin 08.00% SC					
Tea	Red spider mite, Tea Mosquito bug	40.00	500	400	11
Apple	Mites	60 gm (0.006% Conc.)	7.50 ml/tree	10 lit/tree	21
Bifenthrin 08.80% CS					
Rice (Paddy)	Stem borer, Leaf folder	44.0	500	500	21
Bifenthrin 10.00% EC					
Cotton	Bollworms, Whitefly	80.0	800	500	15
Rice (Paddy)	Stem borer, Leaf folder, Green leaf hopper	50.0	500	500	21
Sugarcane	Termites	100.0	1000	500	300

Bifenthrin 02.50% EC

1. Pre and post construction: Bifenthrin 2.5% EC shall be applied at 0.05% a.i. conc. i.e. 20.0 ml formulated product diluted in 1 liter of water for the control of termites in building during pre and post construction. Treatment should be as per IS 6313 (Part 2):2001 for pre construction chemical treatment and IS 6313 (Part-3): 2001 for post construction treatment of the existing building.
2. Recommendation for use of control of Wood borer (Powder Post Beetle) in plywood, veneer and wood

Use	**Method of application**	**Dosage (a.i.)**	**Dilution**
Plywood	Glue Line Poisoning	10 g/meter3 of wood	400 ml formulation per meter3 of wood

	Dipping	0.025% Solution	Mix 01 lit of formulation in 99 lit of water to make 0.025% Solution		
Veneer	Dipping	0.025% Solution	Mix 01 lit of formulation in 99 lit of water to make 0.025% Solution		
Wood	Dipping /Brushing	0.025% Solution	Mix 01 lit of formulation in 99 lit of water to make 0.025% Solution		
Bifenthrin 08.00% SC					
Tea	Red spider mite, Tea mosquito bug	40.0	500	400	11
Apple	Mites	60.0	7.5ml/lit	10 lit/tree	21
Bromadiolone 00.25% CB					
Paddy (Rice)	Field Rat, Large Bandicota Indian house rat, Indian field mouse	0.005	-	-	-
Wheat , Gram	Field Rat, Indian house rat	0.005	-	-	-
Groundnut, Sugarcane	Field Rat, Large Bandicota	0.005	-	-	-
Coconut/ Bamboo	Indian house rat	0.005	-	-	-
Residential premises	Field Rat, Large Bandicota	0.005	-	-	-
Poultry Farm	Indian house rat, House mouse	0.005	-	-	-
Bromadiolone 00.005% RB					
Paddy (Rice)	Field Rat, Large Bandicota, Indian house rat	0.005	-	-	-
Wheat	Indian Field mouse, Field Rat	0.005	-	-	-

Gram	Indian house rat, Field Rat, Indian house rat	0.005	-	-	-
Groundnut, Sugarcane	Field Rat, Large Bandicota	0.005	-	-	-
Coconut/ Bamboo	Indian house rat, Field Rat Large Bandicota	0.005	-	-	-
Residential premises	Indian House rat, House mouse	0.005	-	-	-
Poultry Farm	Indian house rat, House mouse, Large Bandicota	0.005	-	-	-
Buprofezin 25.00% SC					
Cotton	Whitefly Aphids, Jassids, Thrips	250.0	1000	500-750	20
Chilies	Yellow Mite	75.0-150.0	300-600	500-750	05
Mango	Hoppers	0.025%-0.05%	1-2 ml/liter of water	5-15 liter per tree	20
Grapes	Mealy bugs	250.0-375.0	1000-1500	500-1000	07
Rice	Brown plant hopper, Green leaf hopper, White Back Plant Hopper	200.0	800	400-500	20
Buprofezin 70.00% DF					
Okra (Bhindi)	Jassids	200.0	286	500	05
Carbofuran 03.00% CG					
Barley	Aphid, Cyst nematode	1000.0	33300	-	-
	Jassids	1250.0	41600	-	-

Bajra	Shoot fly	1500.0	50000	-	-
Sorghum	Shoot fly	1000.0	33300	-	-
	Stem borer	250.0	8300	-	-
Jute	Nematodes	1000.0	33300	-	-
Groundnut	Pod borer	1500.0	50000	-	-
	White grub	1000.0	33300	-	-
French bean	White grub	700.0	23300	-	-
Potato	Aphid	500.0	16600	-	-
	Jassids	1000.0	33300	-	-
Tomato	Whitefly fly	1200.0	40000	-	-
Apple	Woolly aphid	05/tree	166/tree	-	-
Citrus	Nematode	360.0	12000	-	-
	Leaf miner	1500.0	50000	-	-
Maize	Stem borer, Shoot fly, Thrips	1000.0	33300	-	-
Paddy (Rice)	Brown plant hopper Gall midge, Stem borer, Green leaf hopper, Hispa	750.0	25000	-	-
	Nematodes	1500.0	50000	-	-
Mustard	Mustard leaf miner	2000.0	66600	-	-
	Whitefly	1000.0	33300	-	-
Soybean	Root knot nematode	1500.0	50000	-	-
Sugarcane	Top borer	2000.0	66600	-	-
Bhindi (Okra)	Jassids	1000.0	33300	-	-
Chilli	Aphid , Thrips	1000.0	33300	-	-

Cabbage	Nematode	1000.0	50000	-	-
Wheat	Ear cockle nematode	3000.0	10000	-	-
	Cereal cyst nematode	2000.0	66600	-	-
Brinjal	Root knot nematode, Reniform nematode	2000.0	66600	-	-
Banana	Rhizome weevil	01 g/ suckers	33 g/sucker	-	-
	Aphid	50 g/ suckers	166 g/sucker	-	-
	Nematode	1.5 g/suckers	50 g/suckers	-	-
Peach	Leaf curl aphid	1000.0	33300	-	-
Mandarins	Soft greens scale	0.40 g/plant	13.30 g/plant	-	-
French bean	White grubs	750.0	23300	-	-
	Grey & Stem weevil	1000.0	33300	-	-
Pea	Shoot fly & Aphid	1000.0	-	-	-
Tea	Cock chafer grub	0.30 g/plant	33.10 g/plant	-	-
Carbosulfan 06.00% Granules					
Rice (Paddy)	Yellow stem borer, Gall midge, Green leaf hopper, Leaf folder	1000.0	16700	-	37
Carbosulfan 25.00% EC					
Rice (Paddy)	Green leaf hopper, White Back Plant Hopper, Brown plant hopper, Gall midge, Stem borer	200.0-250.0	800-1000	500-1000	14
Chilli	Leaf folder	200.0-250.0	800-1000	500-1000	14
	White aphid	200.0-250.0	800-1000	500-1000	08
Carbosulfan 25.00% DS					

Cotton	Jassid, Aphids, Thrips	15 gm/kg seed	60 gm/kg seed	Not required	-
Cartap Hydrochloride 04.00% Granules					
Rice (Paddy)	Yellow stem borer	750.0	18750	-	-
	Leaf folder, Whorl maggot	750-1000	18750-25000	-	-
Cartap Hydrochloride 50.00% SP					
Rice (Paddy)	Yellow stem borer, Leaf folder	500.0	1000	500-1000	-
Cartap Hydrochloride 75.00% SG					
Rice	Yellow stem borer, Leaf folder	318.75-375	425-500	250-500	35-89
Chlorantraniliprole 18.50% SC					
Rice	Yellow stem borer, Leaf folder	30.0	150.0	500	47
Cabbage	Diamond back moth	10.0	50.0	500	03
Cotton	American bollworm, Spotted bollworm, Tobacco caterpillar	30.0	150.0	500	09
Sugarcane	Termite	100.0-125.0	500-625	1000	208
	Early shoot borer, Top borer	75.0	375.0	1000	208
Tomato	Fruit borer	30.0	150.0	500	03
Chilli	Fruit borer	30.0	150.0	500	03
Brinjal	Shoot & Fruit borer	40.0	200.0	500-750	22
Pigeon pea	Pod borer	30.0	150.0	500-750	29
Soybean	Green Semi looper, Stem fly, Girdle	30.0	150.0	500-750	22

	beetle				
Bengal gram	Pod borers	25.0	125.0	500	11
Black gram	Pod borers	20.0	100.0	500	20
Bitter gourd	Fruit borers & Caterpillars	20.0-25.0	100-125	500	07
Okra (Bhindi)	Fruit Borer	25.0	125.0	500	05
Chlorantraniliprole 00.40% GR					
Rice (Paddy)	Yellow stem borer, Leaf folder	40.0	10000	-	53
Sugarcane	Early shoot borer, Top borer	75.0	18.75	-	147
Chlorfenapyr 10.00% SC					
Cabbage	Diamond back moth (*Plutella xylostella*)	75.0-100.0	750-1000	500	07
Chilli	Mites (*Polyphagotarsonemus latus*)	75.0-100.0	750-1000	500	05
Chlorfluazuron 05.40% EC					
Cabbage	Diamond back moth, Tobacco leaf eating caterpillar	75.0	1500	500	07
Cotton	American bollworm, Tobacco leaf eating caterpillar	75.0-100.0	1500-2000	500	10
Chlorpyrifos 10.00% G					
Rice (Paddy)	Yellow stem borer, Leaf folder, Gall midge	1000.0	10000	-	30
Chlorpyrifos 20.00% EC					
Paddy (Rice)	Hispa	250.0	1250	500-1000	-

	Leaf folder	375.0	1875	500-1000	-
	Gall midge, Yellow stem borer, Whorl maggot	250.0	1250	500-1000	-
Beans	Pod borer, Black bug	600.0	3000	500-1000	-
Gram	Cut worm	500.0	2500	500-1000	-
Sugarcane	Black bug	150.0	750	500-1000	-
	Early shoot & stalk borer	250.0-300.0	1250-1500	500-1000	-
	Pyrilla	300.0	1500	500-1000	-
Cotton	Aphid, Bollworm, Whitefly	250.0	1250	500-1000	-
	Cut worm	750.0	3750	500-1000	-
Groundnut	Aphid	200.0	1000	500-1000	-
	Root grub	225.0	1125	500-1000	-
Mustard	Aphid	100.0	500	500-1000	-
Brinjal	Shoot & fruit borer	200.0	1000	500-1000	-
Cabbage	Diamond back moth	400.0	2000	500-1000	-
Onion	Root grub	1000.0	5000	500-1000	-
Apple	Aphid	0.05%	3750-5000	1500-2000	-
Ber	Leaf hopper	0.03%	2250-3000	1500-2000	-
Citrus	Black citrus, Aphid	0.02%	1500-2000	1500-2000	-
Tobacco	Ground beetle	350.0	1750	500-1000	-

Termite control

- Non cropped area:
    1. Building (Pre & Post construction treatment @1.0% a.i.)
    2. Forestry @1.0% a.i.
- Cropped area:
    1. Wheat: 3-4 ml/kg seed
    2. Barley: 4-6 ml/kg seed
    3. Gram: 15-30 ml/kg seed
- Soil treatment:
    1) Wheat: 2-3 lit/ha.
    2) Sugarcane: 6.25 lit/ha.

Chlorpyrifos 50.00% EC					
Rice (Paddy)	Yellow stem borer, Leaf roller	375-400	750-800	500-1000	15
Cotton	Bollworms	500-600	1000-1200	500-1000	30
➢ **For non- agricultural use: -** For protecting building from termite attack at pre and posts construction stages, apply Chlorpyriphos 50% EC @ 0.5% and 1.0% concentration.					
Chlorpyrifos 01.50% DP					
Paddy (Rice)	Yellow stem borer, Green leaf hopper, Brown plant hopper, Leaf folder, Gall midge, Grass hopper	375.0	25000	-	07
Bengal gram	Pod borer (*Helicoverpa armigera*)	375.0	25000	-	07
Chromafenozide 80.00% WP					
Paddy (Rice)	Leaf folder, Stem borer	75.0-100.0	94-125	500	32
Clothianidin 50.00% WDG					
Rice (Paddy)	Brown plant hopper	10.0-12.0	20.0-24.0	500	12
Cotton	Jassids	15.0-20.0	30.0-40.0	500	20
	Whitefly	20.0-25.0	40.0-50.0	500	20

Cotton (Soil drench)	Jassids, Aphids, Thrips, Whitefly	100.0-125.0	200-250	1000	76
Sugarcane (Soil drench)	Termite	125.0	250.0	1000	310
Tea	Mosquito Bug (*Helopeltis theiovora*)	60.0	120.0	500	05
Coumatetralyl 00.75% w/w					
Indoor or outdoor	Rats (*Rattus rattus, Rattus norvegicus, Bandicota bengalensis, Bandicota indica, Tetra indica, Meriones hurrianae*)	01 mg per spot	2.50 per spot	-	-
Indoor	Mice	01	2.50	-	-
Coumatetralyl 00.0375% Bait					
Indoor or outdoor	Rats (*Rattus rattus, Rattus norvegicus, Bandicota bengalensis, Bandicota indica, Tetra indica, Meriones hurrianae*)	01 mg per spot	02.50 per spot	-	-
Indoor	Mice	01	02.50	-	-
Cyantraniliprole 10.26% OD					
Grapes	Thrips (*Scirtothrips dorsalis),* Flea beetle (*Scelodonta strigicollis)*	70.0	700.0	1000	05
Pomegranate	Thrips (*Scirtothrips dorsalis),* Pomegranate butterfly (*Deudorix 19socrates)*	75 (0.0075%)	750 (0.075%)	1000	05

	Whitefly (*Siphoninus phillyreae),* Aphids (*Aphis punicae*)	90 (0.009%)	900 (0.09%)	1000	05
Cabbage	Cabbage Aphid (*Brevicoryne brassicae*), Mustard Aphid (*Lipaphis erysimi*), Diamond back moth (*Plutella xylostella*), Tobacco caterpillar (*Spodoptera litura*)	60.0	600.0	500	05
Chilli	Thrips (*Scirtothrips dorsalis*), Fruit borer (*Helicoverpa armigera*), Tobacco caterpillar (*Spodoptera litura*)	60.0	600.0	500	03
Tomato	Leaf miner (*Liriomyza trifolii*), Aphids (*Aphis gossypii*), Thrips (*Thrips tabaci*), Whitefly (*Bemesia tabaci*), Fruit borer (*Helicoverpa armigera*)	90.0	900.0	500	03
Gherkins	Leaf miner (*Liriomyza trifolii*), Red pumpkin beetle (*Aulacophora foveicollis*), Aphids (*Aphis gossypii*), Thrips (*Thrips palmi*), Whitefly (*Bemesia tabaci*), Pumpkin caterpillar (*Diaphania indica*), Fruit fly (*Bactrocera cucurbitae*)	90.0	900.0	500	05

Cyenopyrafen 30.00% SC					
Apple	Mite	60.0-90.0	200-300	1000	15
Chilli	Mite	60.0-90.0	200-300	400-600	07
Cyflumetofen 20.00% SC					
Tea	Red spider mite	125.0-150.0	625-750	400-500	05
Cypermethrin 00.25% DP					
Brinjal	Fruit & shoot borer	5.00-60.0	20000-24000	-	03
Cypermethrin 10.00% EC					
Cotton	Spotted bollworm, American bollworm, Pink bollworm	50.0-70.0	550-760	150-1000	07
Cabbage	Diamond back moth	60.0-70.0	650-760	100-400	07
Okra (Bhindi)	Fruit borer	50.0-70.0	550-760	150-400	03
Brinjal	Fruit & shoot borer	50.0-70.0	550-760	150-400	03
Wheat	Shoot fly	50.00	550.0	500-800	14
Sunflower	Bihar hairy caterpillar	60.0-70.0	650-760	500-700	14
Cypermethrin 25.00% EC					
Cotton	Bollworms	40.0-70.0	160-280	400-800	-
	Jassids, Thrips	20.0-30.0	80-120	200-300	-
Bhindi (Okra)	Shoot & fruit borer, Jassids	37.0-50.0	150-200	500	03
Brinjal	Shoot & fruit borer, Jassids, Epilachna grub (Hadda beetle)	37-50	150-200	500	01
Dazomet					
Tobacco (Nursery)	Root knot nematode,	30.0-40.0	30.0-40.0	-	-

	Stunt nematode, Reni-form nematode				
Tomato nursery	Root knot nematode	30.0-40.0	30.0-40.0	-	
Floriculture (Carnation & Gerbera)	Root-knot nematode	30.0-40.0	30.0-40.0		-
Deltamethrin 11.00% w/w EC					
Cotton	Bollworms	12.50	125.0	400-600	30
Rice (Paddy)	Yellow stem borer, Leaf folder, Green leaf hopper, Whorl maggot	15.00	150.0	500	13
Tea	Tea Thrips	10.0	100.0	400	15
Deltamethrin 25.00% Tablet					
Cotton	Bollworms	12.50	50.0	400-600	30
Deltamethrin 01.80% EC					
Cotton	Bollworms	12.50	781.0	400-600	30
	Sucking insects	10.00	625.0	400-600	30
Rice (Paddy)	Stem borer, Leaf folder	10-12.50	625-780	500	07
Deltamethrin 02.50% WP					
Wheat & Rice (Grain & seed in stacks)	Rice weevil, Leaser grain borer, Khapra beetle, Red flour beetle, Saw toothed grain beetle, Rice moth, Almond moth	30.00	1200	1 litre/30 m^2	-
Walls, ceilings floors of Godowns	Rice weevil, Leaser grain borer, Khapra beetle, Red flour beetle, Saw toothed grain beetle, Rice	30.00	1200	1.5-2.5 litre/50 m^2	-

	moth, Almond moth				
Public health	Mosquito	625-1250	25000-50000	-	-
Deltamethrin 02.80% EC					
Cotton	Bollworm	12.50	500.0	400-600	-
	Sucking Insects	10.00	400.0	400-600	-
Tea	Thrips, Caterpillar	3.0-4.0	120-150	400-600	03
	Leaf folder	10.0	400.0	400-600	03
	Lopper	2.5-3.75	100-150	400-600	03
Bhindi (Okra)	Shoot & fruit borer	10.0-15.0	400-600	400-600	01
	Jassid	10.0	400.0	400-600	01
Groundnut	Leaf miner	12.50	500.0	400-600	03
Mango	Hoppers	0.03-0.05%	0.33-0.5 ml/lit	As per spray field requirement	01
Chilli	Fruit borer	10-12.5	400-500	400-600	05
Brinjal	Shoot & Fruit Borer	10-12.5	400-500	500	03
Red Gram (Arhar/Tur)	Pod Borer & Pod Fly	12.50	500.0	500	10
Dichlorvos 76.00% EC (The use of Dichlorvos shall be completely banned with effect from the 31st December, 2020).					
Paddy (Rice)	Brown plant hopper	375.0	470.0	500-1000	-
	Cut worm, Army worm, Leaf folder	500.0	627.0	500-1000	-
Wheat	Caterpillar	500.0	627.0	500-1000	-
Soybean	Leaf eating caterpillar	225.0-300.0	282-376	500-1000	-
Castor	Hairy caterpillar	625.0	783.0	500-1000	-

Groundnut	Red hairy caterpillar	375.0-750.0	470-940	500-1000	-
Mustard	Painted bug	500.0	627.0	500-1000	-
Sunflower	Caterpillars, Cabbage looper, Semi looper	500.0	627.0	500-1000	-
Cucurbit	Red pumpkin beetle	500.0	627.0	500-1000	-
Cashew	Apple borer	0.05%	940-1253	1500-2000	-
Dicofol 18.50% EC					
Tea	Red spider mite, Scarlet mite, Pink mite, Purple mite, Yellow mite	230.0	1250.0	250	15-20
Okra (Bhindi)	Red spider mite	250.0-500.0	1350-2700	500-1000	15-20
Citrus	Red spider mite	0.05%	2700-4050	1000-5000	15-20
Litchi	Red spider mite	0.05%	2700-4050	1000-5000	15-20
Cotton	Red spider mite	500.0-1000.0	2700-5400	500-1000	15-20
Brinjal	Yellow mite	500.0-1000.0	2700-5400	500-1000	15-20
Bottle & Bitter gourd	Red spider mite	250.0-500.0	1350-2700	500-1000	15-20
Diafenthiuron 50.00% WP					
Cotton	Whiteflies, Aphids, Thrips, Jassids	300.0	600.0	500-1000	21
Cabbage	Diamond back moth	300.0	600.0	500-750	07
Chilli	Mites	300.0	600.0	500-750	03
Brinjal	Whitefly	300.0	600.0	500-750	03
Cardamom	Thrips, Capsule borer	400.0	800.0	1000	07

Citrus	Mites	1.0 g/l	2.0 g/l	2-3 liter/ha.	30
Cotton	Whiteflies, Aphids, Thrips, Jassids	239.0	500.0	500	30
Diflubenzuron 25.00% WP					
Cotton	Tobacco Caterpillar	75.0-87.50	300-350	500-1000	-
	Bollworms	75.00	300.0	500-1000	-
Dimethoate 30.00% EC					
Bajra	Milky weed bug	180.0-200.0	594-660	500-1000	-
Maize	Stem borer	200.0	660.0	500-1000	-
	Shoot fly	350.0	1155.0	500-1000	-
Sorghum	Midge	500.0	1650.0	500-1000	-
Castor	Jassids, Mites	250.0	825.0	500-1000	-
	Semi looper	350.0	1155.0	500-1000	-
Mustard	Leaf minor, Aphid, Sawfly	200.0	660.0	500-1000	-
Safflower	Aphid	200.0	660.0	500-1000	-
Onion	Thrips	200.0	660.0	500-1000	-
Potato	Thrips	200.0	660.0	500-1000	-
Apricot	Aphid	0.03%	1485-1980	1500-2000	-
Banana	Aphid, Lace wing bug	0.03%	1485-1980	1500-2000	-
Citrus	Black aphid	0.03%	1485-1980	1500-2000	-
Fig	Fig Jassid	0.03%	1485-1980	1500-2000	-

	Mealy bug	0.03%	2475-3300	1500-2000	-
Mango	Hopper	0.05%	2475-3300	1500-2000	-
Rose	Scale	750.0	2475.0	500-1000	-
	Thrips	400.0	1320.0	500-1000	-
Dinotefuran 20.00% SG					
Rice (Paddy)	Brown plant hopper	30.0-40.0	150-200	500	21
Cotton	Whitefly, Jassids, Aphids & Thrips	25.0-30.0	125-150	500	15
Emamectin benzoate 05.00% SG					
Cotton	Boll worms	9.5-11.0	190-220	500	10
Okra (Bhindi)	Fruit & Shoot Borer	6.75-8.50	135-170	500	05
Cabbage	Diamond back moth	7.5-10.0	150-200	500	03
Chilli	Fruit borer, Thrips, Mites	10.00	200.0	500	03
Brinjal	Fruit and Shoot borer	10.00	200.0	500	03
Red gram (Arhar/Tur)	Pod borer	11.00	220.0	500-750	14
Chickpea	Pod borer	11.00	220.0	500	14
Grapes	Thrips	11.00	220.0	500-1000	05
Tea	Tea looper	10.00	200.0	500	01
Emamectin benzoate 01.90% EC					
Cotton	Boll worms	11.00	580	500	15
Chilli	Fruit borer , Thrips	07.13	375	500	03
Chick pea	Pod borer	07.13	375	500	14

Ethion 50.00% EC						
Tea	Red spider mites, Purple mites, Yellow mite, Thrips, Scale		250.0	500	500-1000	03
Cotton	Whitefly		750.0-1000.0	1500-2000	500-1000	-
	Bollworms		1000.0	2000	500-1000	25
Chilli	Mites & thrips		750.0-1000.0	1500-2000	500-1000	05
Gram	Pod borer		500.0-750.0	1000-1500	500-1000	21
Pigeon pea or Redgram (Arhar/Tur)	Pod borer		500.0-750.0	1000-1500	500-1000	21
Soybean	Girdle beetle & stem fly		750.0	1500	500-1000	30
Ethofenoprox 10.00% EC						
Rice	Brown plant hopper, Green leaf hopper Stem borer, Leaf folder, Gall midge, Whorl maggot, White backed plant hopper		50.0-75.0	500-750	500	15
Ethylene dichloride+Carbon tetrachloride (3:1)						
Crop	**Common name of the pest**	**Cond.**	**Weight of volume**	**Exposure period**	**Conc. In air (ppm)**	**Aeration / Waiting**
Stored whole cereals Millets Pulses	Rice weevil, Lesser grain Borer, Khapra Beetle, Rust red flour	Air tight cover	300-400 gm/m^3 (230-307 ml)	48-72 Hr. for cover fumigation	10 ppm	Partial aeration For at least 1 hr. followed by 24 hr. complete Aeration waiting period of 24 hr.

	beetle, Pulse beetle, Dried fruit Beetle					
Godown fumigation	Rice weevil, Lesser grain Borer, Khapra Beetle, Rust red flour beetle, Pulse beetle, Dried fruit Beetle	Air tight cover	150 gm/m3	07 days	10 ppm	Partial aeration For at least 1 hr. followed by 24 hr. complete Aeration waiting period of 24 hr.
Etoxazole 10.00% SC						
Brinjal	Red spider mite		40.0	400	400-500	05
Tea	Red spider mite		40.0	400	400	05
Fenazaquin 10.00% EC						
Tea	Red spider mite, Pink Mite, Purple mite		100.0	1000	400-600	07
	Scarlet mite		125.0	1250	400-600	07
Chilli	Yellow mite		125.0	1250	400-600	10
Apple	Red spider mite, Two spotted mite		40.0	400	1000	30
Okra (Bhindi)	Red spider mite		125.0	1250	500	07
Brinjal	Red spider mite		125.0	1250	500	07
Tomato	Two spotted spider mite		125.0	1250	500	07

Fenobucarb (BPMC) 50.00% EC					
Brown plant hopper, Green leaf hopper	250-750	500-1500	500	30	-
Fenpropathrin 10.00% EC					
Cotton	Pink boll worm, Spotted boll worm, American boll worm	75.0-100.0	750-1000	750-1000	14
Fenpropathrin 30.00% EC					
Cotton	Pink boll worm, Spotted boll worm, American boll worm, White fly	75.0-100.0	250-340	750-1000	14
Chilli	Thrips, Whitefly, Mites	75.0-100.0	250-340	750-1000	07
Brinjal	Whitefly, Shoot and Fruit borer, Mites	75.0-100.0	250-340	750-1000	10
Okra (Bhindi)	Whitefly, Shoot and Fruit borer, Mites	75.0-100.0	250-340	750-1000	07
Tea	Mites	50.0-60.0	165-200	400-500	07
Paddy	Yellow stem borer, Leaf folder	100.0	333	500	30
Fenpyroximate 05.00% EC					
Tea	Red spider mite, Pink Mite, Purple mite	15.0-30.0	300-600	400-500	07
Chilli	Yellow mite	15.0-30.0	300-600	300-500	07
Coconut	Eriophyid mites	0.50 gm/tree (Root feeding)	10ml/lit.	As required	-
	Eriophyid mites	0.056-0.075 gm/tree	0.75-01.0 ml/lit.	As required	-

Fenvalerate 20.00% EC					
Cauliflower	Diamond back moth, American boll worm, Aphids, Jassids	60.0-75.0	300-375	600-750	07
Cotton	Boll worm	75.0-100.0	375-500	700-900	07
	Aphids, Jassids, Thrips	25.0-40.0	125-200	250-400	07
Brinjal	Shoot & fruit borer, Aphids	75.0-100.0	375-500	600-800	05
Okra (Bhindi)	Shoot & fruit borer, Jassids	60.0-75.0	300-375	600-750	07
Fenvalerate 02.00% EC					
Cotton	Spotted & Spiny, Pink American, Egyptian boll worm	80.0-100.0	4000-5000	-	-
Fenvalerate 00.40% DP					
Cotton	Spotted Bollworm, Pink Bollworm	80.0-100.0	20000-25000	-	07
Fipronil 05.00% SC					
Rice	Stem borer, Brown plant hopper, Green leaf hopper, Rice leaf hopper, Rice Gall midge, Whorl maggot, White backed plant hopper	50.0-75.0	1000-1500	500	32
Cabbage	Diamond back moth	40.0-50.0	800-1000	500	07
Chilli	Thrips, Aphids, Fruit borers	40.0-50.0	800-1000	500	07
Sugarcane	Early shoot borer & Root borer	75.0-100.0	1500-2000	500	270

Cotton	Aphid, Jassid, Thrips, White fly	75.0-100.0	1500-2000	500	06
	Boll worms	100.0	2000	500	07
Fipronil 18.87% w/w SC					
Cotton	Thrips	75.0	375	375 -500	21
Fipronil 02.92% EC					
Pre-construction (Building)	Termite	0.25%	100	01	IS:6313-2001 (Part-2)
Post-construction (Building)	Termite	0.25%	100	01	IS:6313-2001 (Part-3)
Fipronil 00.30% GR					
Rice	Stem borer, Brown plant hopper, Green leaf hopper Rice leaf hopper, Rice gall midge, Whorl maggot, White backed plant hopper	50.0-75.0	16670-25000	-	32
Sugarcane	Early shoot borer, Root borer	75.0-100	25000-33300		09
Wheat	Termites	0.06	20 kg	-	91
Fipronil 00.60% w/w GR					
Rice	Stem borer & Leaf folder	60.0	10.0	65.0	-
Fipronil 80.00% WG					
Rice	Stem borer, Leaf folder	40.0-50.0	50.00-62.50	375 -500	19
Grapes	Thrips	40.0-50.0	50-62.5	750-1000	10
Onion	Thrips	60.0	75	500	15

Cabbage	Diamond back moth	75.0	93.75	500	15
Flonicamid 50.00% WG					
Rice	Brown plant hopper, White backed plant hopper, Green leaf hopper	75.0	150	500	36
Cotton	Aphids, Jassids, Thrips & Whiteflies	75.0	150	500	25
Flubendiamide 20.00% WG					
Rice	Stem borer, Leaf borer	25.0	125	500	30
Cotton	American bollworm	50.0	250	500	30
Tomato	Fruit borer	48.0	100	375-500	05
Cabbage	Diamond back moth	18.24	37.5-50	375-500	07
Tea	Semilooper	30.0	150	400	07
Chilli	Fruit borer	50.0-60.0	250-300	500	05
Flubendiamide 39.35% m/m SC					
Rice	Yellow stem borer, Leaf folder	24.0	50.0	375-500	40
Cotton	Bollworms (American & Spotted bollworm)	48.0-60.0	100-125	375-500	25
Pigeon pea	Pod borer	48.0	100	500	10
Black gram	Fruit borer	48.0	100.0	500	11
Chilli	Fruit borer	48.0-60.0	100-125	500	07
Tomato	Fruit borer	48.0	100.0	375-500	05
Cabbage	Diamond moth back	18.24	37.5-50	375-500	07
Soybean	Defoliators	72.0	150	500	17

	(*Helicoverpa armigera*, *Spodoptera litura* and Semilooper)				
Flubendiamide 00.70% GR					
Paddy	Stem borer	85.0-100.0	12.14-14.28	Not applicable	25
Flufenoxuron 10.00% DC					
Rose	Mites	50.0	500	500-1000	06
Flumite 20.00% SC / Flufenzine 20.00% SC					
Brinjal	Mite	80.0-100.0	400-500	500-1000	05
Tea	Pink mite, Purple mite	80.0-100.0	400-500	500-1000	07
	Red spider	100.0-120.0	500-600	500-1000	07
Fluopyram 34.48% w/w SC					
Tomato	Root knot nematode (*Meloidogyne incognita*)	250 (2 application) or 500 (Single application)	625 (2 application) or 1250 (Single application)	1000	05
Flupyradifurone 17.09% w/w SL					
Okra (Bhindi)	Jassids, Whitefly	250.0	1250	500	03
Fluvalinate 25.00% EC					
Cotton	Aphids, Jassids, Red cotton bug	50.0-100.0	200-400	500-1000	07
	Bollworm	50.0-100.0	200-400	500-1000	07
Hexythiazox 05.45% w/w EC					
Tea	Scarlet mite, Red spider mite	15.0-25.0	300-500	400/ha	05

Chilli	Yellow mites	15.0-25.0	300-500	625/ha	03
Apple	European Red Mite	0.002%	0.04%	10ltr./tree	15
Imidacloprid 70.00% WG					
Cotton	Jassids, Aphids, Thrips	21.0-24.5	30-35	375-500	07
Rice (Paddy)	Brown plant hoppers, White backed plant hoppers	21.0-24.5	30-35	300-375	07
Okra (Bhindi)	Jassids, Aphids, Thrips	21.0-24.5	30-35	300-375	03
Cucumber	Aphids & Jassids	24.5	35.0	500	05
Imidacloprid 48.00% FS					
Cotton	Aphids, Whitefly, Jassids, Thrips	300-540	500-900	-	NR
Okra (Bhindi)	Jassid, Aphid	300-540	500-900	-	-
Sunflower	Jassid, Whitefly	300-540	500-900	-	-
Sorghum	Shoot fly	720.0	1200	-	-
Pearl millet	Shoot fly and termites	720.0	1200	-	-
Soybean	Jassids	75.0	125	-	-
Maize	Shoot fly	0.6	1.0	-	-
Rice	Thrips	0.15	0.25	-	-
Imidacloprid 70.00% WS					
Cotton	Aphids, Whitefly, Jassids, Thrips	350.0-700.0	500-1000	-	NR
Okra (Bhindi)	Jassid, Aphid	350.0-700.0	500-1000	-	-
Chilli	Jassid, Aphid, Thrips	700-1050	1000-1500	-	-

Sunflower	Jassid, Whitefly	490.0	700	-	-
Sugarcane	Termite	70-105	100-150	-	-
Sorghum	Shoot fly	700.0	1000	-	-
Pearl millet	Termites and shoot fly	700.0	1000	-	-
Mustard	Mustard sawfly, Painted bug	490.0	700	-	-
Imidacloprid 30.50% m/m SC					
Cotton	Aphid, Jassids, Thrips	21.0-26.25	60.0-75.0	500-750	26
Rice (Paddy)	Brown plant hopper, White backed plant hopper	21.0-26.25	60.0-75.0	500-750	37
For non- agricultural use:- For protecting building from termite attack at pre and post construction stages, apply Imidacloprid 30.5% m/m SC @ 0.075% a.i. concentration.					
Imidacloprid 17.80% SL					
Cotton	Aphid, Whitefly, Jassid, Thrips	20.0-25.0	100.0-125.0	500.0-700.0	40
Paddy (Rice)	Brown plant hopper, White backed plant hopper, Green leaf hopper	20.0-25.0	100.0-125.0	500.0-700.0	40
Chilli	Jassid, Aphid, Thrips	25.0-50	125-250	500-700	40
Sugarcane	Termite	70.0	350.0	1875	45
Mango	Hopper	0.40-0.80 g/tree	2.0-4.0 ml/tree	10 litre	45
Sunflower	Whitefly, Jassid, Thrips,	20.0	100.0	500	30
Okra (Bhindi)	Aphid, Jassid, Thrips	20.0	100.0	500	03

Citrus	Leaf miner, Psylla	10.0	50.0	Depending on size of tree & Protection equipment used	15
Groundnut	Aphid , Jassid	20.0-25.0	100.0-125.0	500	40
Tomato	Whitefly	30.0-35.0	150.0-175.0	500	03
Grapes	Flea beetle	0.06-0.08	300.0-400.0	1000	32
Imidacloprid 00.30% GR					
Paddy	Yellow stem borer	0.045	15.0 kg	-	26
Indoxacarb 14.50% SC					
Cotton	Bollworm	75.0	500.0	600-1000	16
Cabbage	Diamond back moth	30.0-40.0	200-266	400-750	07
Chilli	Fruit borer	50.0-60.0	333-400	300-600	05
Tomato	Fruit borer	60.0-75.0	400-500	300-600	05
Pigeon pea	Pod borer complex	50.0-60.0	353-400	500-1000	15
Indoxacarb 15.80% EC					
Cotton	Bollworm	75.0	500.0	500-1000	14
Cabbage	Diamond back moth	40.0	266.0	500-1000	05
Pigeon pea	Pod borer complex	50.0	333.0	500-700	12
Rice	Leaf folder, Piller, Green Semilooper, Stem fly	30.0	200.0	500	14
Soybean	Tobacco caterpillar, Green Semilooper, stem fly	30.0	333.0	500	31

Lambda-cyhalothrin 04.90% CS					
Cotton	Bollworms	25.0	500.0	500	21
Paddy (Rice)	Stem borer, Leaf folder	12.50	250.0	500	15
Brinjal	Shoot & fruit borer	15.0	300.0	500	05
Okra (Bhindi)	Fruit borer	15.0	300.0	500	05
Tomato	Fruit borer	15.0	300.0	500	05
Grapes	Thrips & Flea beetle	12.50	250.0	500-1000	07
Chilli	Thrips, Pod borer	25.0	500.0	500	05
Soybean	Stem fly, Semilooper	15.0	300.0	500	31
Lambda-cyhalothrin 02.50% EC					
Cotton	Bollworms, Jassids, Thrips	15.0-25.0	600-1000	400-600	21
Rice (Paddy)	Leaf folder, Yellow stem borer, Green leaf hopper, Gall midge, Hispa, Thrips	12.50	500.0	400-600	15
Lambda-cyhalothrin 05.00% EC					
Cotton	Bollworms, Jassids, Thrips	15.0-25.0	300-500	400-600	21
Rice (Paddy)	Leaf folder, Stem borer, Green leaf hopper, Gall Midge, Rice hispa, Thrips	12.50	250	400-600	15
Brinjal	Shoot & fruit borer	15.0	300	400-600	04
Tomato	Fruit borer	15.0	300	400-600	04
Chilli	Thrips , mite, pod borer	15.0	300	400-600	05

Pigeon pea	Pod borer, Pod fly	20.0-25.0	400-500	400-600	15
Onion	Thrips	15.0	300	300-400	05
Bhindi (Okra)	Jassids , Shoot borer	15.0	300	300-400	04
Chickpea	Pod borer	25.0	500	300-400	06
Groundnut	Thrips, Leaf hopper, Leaf miner	10-15	200-300	400-500	10
Mango	Hoppers	0.0025-0.005%	0.5-1.0 ml/l of water	-	07
Lufenuron 05.40% EC					
Cabbage	Diamond back moth	30.0	600	500	14
Cauliflower	Diamond back moth	30.0	600	500	05
Pigeon pea	Pod borer, Pod fly	30.0	600	500-1000	65
Cotton	American bollworm	30.0	600	500-750	48
Black gram	Pod borer	30.0	600	500	10
Chilli	Fruit borer	30.0	600	500	05
Magnesium Phosphide Degesch plates recommended for fumigation of un-manufactured tobacco for export, as per importing country requirement.					
Malathion 05.00% DP					
Paddy (Rice)	Rice Hispa	1250	25000	-	-
Sorghum	Earhead midge	1000	20000	-	At 90% emergence of ear head
Malathion 50.00% EC					
Paddy (Rice)	Rice Hispa	575.0	1150	500-1000	-
Sorghum	Earhead midge	500.0	1000	500-1000	-
Pea	Pod borer	750.0	1500	500-1000	-

Soybean	Leaf weevil	750.0	1500	500-1000	-
Castor	Jassids	750.0	1500	500-1000	-
	Semi looper	1000.0	2000	500-1000	-
Sunflower	White fly	500.0	1000	500-1000	-
Bhindi (Okra)	Aphid	500.0	1000	500-1000	-
	Jassids	625.0	1250	500-1000	-
	Spotted Bollworm	750.0	1500	500-1000	-
Brinjal	Mites	750.0	1500	500-1000	-
Cabbage	Mustard aphid	750.0	1500	500-1000	-
Cauliflower	Head borer	750.0	1500	500-1000	-
Radish	Stem borer	750.0	1500	500-1000	-
Turnip	Tobacco caterpillar	600.0	1200	500-1000	-
Tomato	White fly	750.0	1500	500-1000	-
Apple	Sanjose scale, Wooly aphid	0.05%	1500-2000	1500-2000	-
Mango	Mealy scale, Mango hopper	0.075%	2250-3000	1500-2000	-
Grape	Beetle	500.0	1000	1500-2000	-
Metaflumizone 22.00% SC					
Cabbage	Diamond back moth	165.0-220.0	750-1000	500	03
Metaldehyde					
Citrus, Rubber, Paddy (Rice), Tea, Vegetables	Snails, Slugs, Giant, African snails	Available in ready to use 2.5% Dust			
Methomyl 40.00% SP					

Cotton	Bollworms	300.0-450.0	750-1125	500-1000	10
Pigeon Pea	Pod borers	300.0-450.0	750-1125	500-1000	07
Tomato	Pod borers	300.0-450.0	750-1125	500-1000	5/6
Chilli	Pod borers & Thrips	300.0-400.0	750-1125	500-1000	05-06
Groundnut	Spodoptera litura	300.0-350.0	750-850	500	07
Grapes	Mealy bug	500.0	1250	500-1000	10
Methyl Bromide 98.00% w/w					
Stored Whole Cereals and Seed, Millet, Pulses	Rice Weevil, Lesser Grain Bore, Khapra Beetle, Rust Red Flour Beetle, Saw Drug Store Beetle	Air tight cover	24 gm/m3	6-8 hours waiting Period 24 hrs.	As when residues not to exceed 25 ppm
Milled Products: Flour	Khapra Beetle, Rust Red Flour Beetle, Lesser grain borer	Air tight cover	24 -32 gm/m3	12-24 hours waiting Period 72 hrs.	As when residues not to exceed 25 ppm
Dry Fruits, Nuts Spices & Oil Seeds	Rust Red Flour Beetle	Air tight cover	24 -32 gm/m3	24 hrs waiting Period 72 hrs	As when residues not to exceed 25 ppm
Milbemectin 01.00% EC					
Rose	Two spotted, spider mite	04.50	450	1000	05
Chilli	Yellow / White mite	03.25	325	500	07
Monocrotophos 15.00% SG					
Cotton	Aphids, Jassids, Thrips, Whiteflies	200.0	1333	500-1000	58
Monocrotophos 36.00% SL					
Paddy (Rice)	Brown plant hopper,	500.0	1250	500-1000	-

	Yellow stem borer				
	Green leaf hopper, Leaf roller/folder	250.0	625	500-1000	-
Maize	Shoot fly	250.0	625	500-1000	-
Black gram	Pod borer	250.0	625	500-1000	-
Green gram	Pod borer	175.0	437	500-1000	-
Pea	Leaf minor	400.0	1000	500-1000	-
Red gram	Plume mouth, Pod fly	250.0	625	500-1000	-
	Pod borer	500.0	1250	500-1000	-
Sugarcane	Shoot borer	600.0-800.0	1500-2250	500-1000	-
	Mealy bug	600.0	1500	500-1000	-
	Pyrilla	200.0	500	500-1000	-
	Scale Insect	600.0	1500	500-1000	-
	Stalk borer	750.0	1875	500-1000	
Cotton	Bollworms	450.0-800.0	1125-2250	500-1000	-
	Aphid, Leaf Hopper, Thrips	175.0	437	500-1000	-
	Grey weevil	500.0	1250	500-1000	-
	White fly	150.0	375	500-1000	-
Citrus	Black aphids	0.040%	1500-2000	500-2000	10 lit./trees
	Mite	0.025%	937-1250	500-2000	10 lit./trees
Mango	Bug mite	0.040%	1500-2000	500-2000	10 lit./trees
	Gall maker, Hopper, Mealy bug, Shoot borer	0.04%	1500-2000	500-2000	20 lit./trees

Coconut	Black headed Caterpillar	03.50-07.00 gm per tree	08.75-17.50 ml per tree	Lower dose to be applied on plants below 09 years & higher or more than 09 years of age.	-
Coffee	Green bug	625.0	1562	500-1000	-
Cardamom	Thrips	375.0	937	500-1000	-
Novaluron 10.00% EC					
Cotton	American Bollworm	100.0	1000	500-1000	40
Cabbage	Diamond back moth	75.0	750	500-1000	05
Tomato	Fruit borer	75.0	750	500-1000	1-3
Chilli	Fruit borer, Tobacco Caterpillar	33.50	375	500	03
Bengal gram	Pod borer	75.00	750	500	07
Novaluron 08.80% SC					
Cotton	American boll worm, Tobacco caterpillar	100.0	1000	500-1000	20
***Nuclear Polyhedrosis* Virus (NPV) of *Helicoverpa armigera* 00.43% AS**					
Cotton	*Helicoverpa armigera*	2700.0	400-600	-	-
Tomato	*Helicoverpa armigera*	1500.0	400-600	-	-
NPV of *Helicoverpa armigera* 02.00% AS					
Pigeon pea	Pod borer	250.0-500.0	500-750	-	-
Chick pea	Pod borer	250.0-500.0	500-750	-	-

Tomato	Fruit borer	250.0-500.0	500	-	-
NPV of Helicoverpa armigera 02.00% AS, Strain No. GBS/HNPV -01					
Pigeon pea	Pod borer (*Helicoverpa armigera*)	250.0-500.0	500-750	-	-
Gram	Pod borer (*Helicoverpa armigera*)	250.0-500.0	500-750	-	-
NPV of Helicoverpa armigera 02.00% AS, Strain No. BIL/HV-09					
Pigeon pea	Pod borer (*Helicoverpa armigera*)	250.0-500.0	500-750	-	-
Chick pea	Pod borer (*Helicoverpa armigera*)	250.0-500.0	500-750	-	-
Tomato	Fruit borer (*Helicoverpa armigera*)	250-500 ml	500	-	-
NPV of Helicoverpa armigera 02.00% AS, Strain No. IBL-17268					
Pigeon pea	Pod borer (*Helicoverpa armigera*)	250.0-500.0	500-750	-	-
Chick pea	Pod borer (*Helicoverpa armigera*)	500.0-1000.0	500-750	-	-
NPV of *Helicoverpa armigera* 00.43% AS, Strain No. BIL/HV-09					
Cotton	*Helicoverpa armigera*	2700 ml	400-600	-	-
Tomato	*Helicoverpa armigera*	1500 ml	400-600	-	-
NPV of *Helicoverpa armigera* 00.50% AS					

Chick pea	Pod borer	250.0	500	-	
NPV of *Spodoptera litura* 00.50% AS					
Tobacco	Spodoptera litura	1500.0	400-600	-	-
Oxydemeton-methyl 25.00% EC					
Paddy (Rice)	Blue leaf hopper	125.0	500	500-1000	-
	White leaf hopper	250.0	1000	500-1000	-
Maize	Shoot fly	250.0	1000	500-1000	-
Sorghum	Shoot fly	250.0	1000	500-1000	-
Cotton	Aphid, Jassid (leaf hopper)	300.0	1200	500-1000	-
Ground nut	Aphid, Leaf minor	250.0	1000	500-1000	-
Mustard	Aphid	250.0	1000	500-1000	-
Sesamum	Leaf hopper	300.0	1200	500-1000	-
Bhindi (Okra)	White fly	250.0	1000	500-1000	-
	Jassid, Leaf beetle	400.0	1600	500-1000	-
Chilli	Aphid	400.0	1600	500-1000	-
	Mites	500.0	2000	500-1000	-
	Thrips	250.0	1000	500-1000	-
Onion	Thrips	300.0	1200	500-1000	-
Tomato	White fly	250.0	1000	500-1000	-
Potato	Aphids	250.0	1000	500-1000	-
Apple	Sanjose scale	0.07%	4200-5600	1500-2000	-
	Wooly Aphid	0.025%	1500-2000	1500-2000	-

Banana	Tingid bug	0.025%	1500-2000	1500-2000	-
	Aphids	0.05%	3000-4000	1500-2000	-
Mango	Hoppers	0.025%	1500-2000	1500-2000	-
Peaches	Leaf curl aphids	0.025%	1500-2000	1500-2000	-
Coffee	Green bug	625.0	2500	500-1000	-
	Leaf minor	1000.0	4000	500-1000	-
Tobacco	White fly, Aphids	250.0	1000	500-1000	-
Permethrin 25.00% EC					
Cotton	Bollworms	100.0-125.0	400-500	500-1000	-
***Paecilomyces lilacinus* 01.15% WP**					
Brinjal	Root Knot Nematode	03.0 kg	500 kg Organic manure/ Organic fertilizer	-	-
Phenthoate 02.00% DP					
Sorghum	Red spider mite, Pink mite, Purple mite, Scarlet mite	400.0	20000	-	90% Emergence of earhead
Safflower	Aphid	400.0	20000	-	-
Phenthoate 50.00% EC					
Paddy (Rice)	Rice case worm	500.0	1000	500-1000	-
Ground nut	Leaf Webber	500.0	1000	500-1000	-
Phorate 10.00% CG (The use of Phorate shall be completely banned with effect from the 31st December, 2020).					

Bajra	Shoot fly	3000.0	30000	-	-
	White grub	2500.0	25000	-	-
Barley	Aphid	1000.0	10000	-	-
Maize	Shoot fly	3000.0	30000	-	-
	Stem borer	1000.0	10000	-	-
Paddy (Rice)	Gall fly, Hispa, Leaf hopper , Plant hopper, Stem borer	1000.0	10000	-	-
	Root weevil	750.0	7500	-	-
Sorghum	Shoot fly, Aphids	1875.0	18750	-	-
	White grub	2500.0	25000	-	-
Wheat	Shoot fly	1875.0	18750	-	-
Black gram	Stem fly, White fly	1000.0	10000	-	-
Green gram	Jassids	1500.0	15000	-	-
	Stem fly	1000.0	10000	-	-
Pigeon pea	Jassids	1500.0	15000	-	-
	Stem fly	1000.0	10000	-	-
Soybean	Stem fly	1500.0	15000	-	-
Sugarcane	Top borer	3000.0	30000	-	-
	White grub	2500.0	25000	-	-
Cotton	Aphid, Jassids, Thrips, White fly	1000.0	10000	-	-
Groundnut	Aphid, Leaf minor	1500.0	15000	-	-
	White grub	2500.0	25000	-	-

Mustard	Mustard aphid	1000.0	10000	-	-
	Painted bug	1500.0	15000		-
Sesamum	Jassids, White fly	1000.0	10000	-	-
Brinjal	Aphid, Jassids, Lace wing bug, Red spider mite	1500.0	15000	-	-
	Thrips	1000.0	10000	-	-
Cauliflower	Aphid	2000.0	20000	-	-
Chilli	Aphid , Mite, Thrips	1000.0	10000	-	-
Potato	Aphid	1000.0	10000	-	-
Tomato	White fly	1500.0	15000	-	-
Apple	Woolly aphid	10-15/plant	100-50 gm/ plant	-	-
Banana	Aphid	2.5-1.25/plant	25-12.5/plant	-	-
Citrus	Leaf minor	1500.0	15000	-	-
Phosalone 35.00% EC					
Barely	Aphid	500.0	1428	500-1000	-
Sorghum	Ear head midge	400.0	1143	500-1000	-
Jute	Red spider mite	350.0	1000	500-1000	-
Brinjal	Fruit borer	500.0	1428	500-1000	-
Cabbage	Aphid	500.0	1428	500-1000	-
Tomato	Fruit borer	450.0	1285	500-1000	-
Tea	Aphid, Pink mite, Purple mite	360.0	1028	500-1000	-
Phosalone 04.00% DP					
Sorghum	Earhead midge	1000.0	25000	-	-

Phosphamidon 40.00% SL (The use of Phosphamidon shall be completely banned with effect from the 31st December, 2020).					
Paddy (Rice)	Yellow stem borer, Leaf folder	500.0	1250	500	30
	Green leaf hopper, Brown plant hopper, White backed plant hopper	350.0	875	500	30
Brinjal	Jassid, Aphid, White fly	250.0-300.0	625-750	500	10
Profenofos 50.00% EC					
Cotton	Bollworm	750.0-1000.0	1500-2000	500-1000	15
	Jassids, Aphids, Thrips, Whiteflies	500.0	1000	500-1000	15
Soybean	Semi looper & Girdle beetle	500.0	1000	500	40
Propargite 57.00% EC					
Tea	Red spider mite, Pink mite, Purple mite, Scarlet mite	430.0-612.0	750-1250	400	07
Chilli	Mite	850.0	1500	500-625	07
Apple	European red mite, Two spotted mite	2.85-5.7/tree	5-10 ml/tree	10 lit/tree	09
Brinjal	Two spotted spider mite	570.0	1000	400	06
Pymetrozine 50.00% WG					
Paddy	Brown plant hopper	150.0	300	500	19
Pyriproxyfen 10.00% EC					
Cotton	Whitefly	100.0	1000	500	31

Cotton	Whitefly	50.0-60.0	500-700	500	50
Chilli	Whitefly, Aphids	50.0	500	300	07
Pyridaben 20.00% w/w WP					
Tea	Red spider mite	100.0	500	500	07
Cotton	White fly	100.0	500	500	28
Pyridalyl 10.00% EC					
Cotton	Bollworms	75.0-100.0	750-1000	500-750	07
Okra	Fruit & shoot borer	50.0-75.0	500-750	500-750	03
Cabbage	Diamond back moth	50.0-75.0	500-750	500-750	03
Quinalphos 25.00% Gel					
Chilli	Aphid	250.0	1000	500-1000	-
Paddy (Rice)	Brown plant hopper, Leaf folder, Stem borer, Hispa	250.0	1000	500-1000	-
Quinalphos 05.00% Granules					
Sorghum	Stem borer	750.0	15000	-	-
Paddy (Rice)	Gall midge, Stem borer	250.0	5000	-	-
Quinalphos 20.00% AF					
Rice (Paddy)	Brown plant hopper, Green leaf hopper, Leaf folder, Stem borer	250.0-300.0	1250-1500	750-1000	40
Okra (Bhindi)	Shoot borer, Fruit borer	250.0-300.0	1250-1500	750-1000	07
Cotton	American bollworm, Pink Bollworm, Spotted bollworm	350.0-500.0	1750-2500	750-1000	07

Tomato	Fruit borer	300.0-350.0	1500-1750	750-1000	07
Tea	Hopper caterpillar	0.05%	1000	400	07
Pigeon pea	Pod borer	500.0	2500	750-1000	30
Groundnut	Spodoptera	250.0-375.0	1250-1775	750-1000	30
Quinalphos 25.00% EC					
Paddy (Rice)	Brown plant hopper	375.0	1500	500-1000	40
	Hispa/blue beetle	500.0	2000	500-1000	40
	Leaf folder	250.0	1000	500-1000	40
	Stem borer	325.0	1300	500-1000	40
Sorghum	Mite, Shoot fly	375.0	1500	500-1000	-
Wheat	Aphid	250.0	1000	500-1000	-
	Ear head Caterpillar, Mite	400.0	1600	500-1000	-
Bengal gram	Pod borer	250.0	1000	500-1000	-
Black gram	Bihar hairy caterpillar	375.0	1500	500-1000	-
French bean	Stem fly	250.0	1000	500-1000	-
Red gram	Pod borer, Pod fly	350.0	1400	500-1000	30
Soybean	Leaf weevil	250.0	1000	500-1000	-
Jute	Leaf roller, Semi looper, Yellow mite	375.0	1500	500-1000	-
Groundnut	Leaf Hopper, Thrips	350.0	1400	500-1000	30
	Leaf miner	250.0	1000	500-1000	30
Mustard	Sawfly	300.0	1200	500-1000	-
Sesamum	Leaf Webber, Jassids	500.0	2000	500-1000	-

Bhindi (Okra)	Fruit borer	200.0	800	500-1000	-
	Leaf hopper, Mite	250.0	1000	500-1000	-
Cauliflower	Stem borer	500.0	2000	500-1000	-
Chilli	Aphid	250.0	1000	500-1000	-
	Mite	375.0	1500	500-1000	-
Tomato	Fruit borer	250.0	1000	500-1000	-
Apple	Wooly Aphid	0.05%	3000-4000	500-1000	-
Banana	Tingid bug	0.05%	3000-4000	500-1000	-
Citrus	Scale	0.07%	4200-5600	500-1000	-
	Citrus butterfly	0.025%	1500-2000	500-1000	-
Pomegranate	Scales	0.08%	4800-6400	500-1000	-
Cardamom	Thrips	0.03%	600-1200	500-1000	30
Tea	Thrips	190.0	760	500-1000	07
Quinalphos 01.50% DP					
Sorghum	Earhead bug	375.0	25000	At milk stage	
	Earhead midge	400.0	26600	At milk stage	
Paddy (Rice)	Brown plant hopper	300.0	20000	-	40
Gram	Pod borer	350.0	23300	At pod formation	
Red gram	Pod borer	350.0	23300	-	30
Soybean	Leaf weevil	250.0	16600	-	-
French bean	Stem fly	300.0	20000	-	-
Cotton	Aphid, Jassids, Thrips	300.0	20000	From square formation onwards	
	Bollworms	450.0	30000	From square formation onwards	

Ground nut	Thrips, Jassids	350.0	23300	-	30
	Red hairy caterpillar	375.0	25000	-	30
Safflower	Aphid	300.0	20000	-	-
Chilli	Aphid	300.0	20000	-	-
Sodium Cyanide					
Place	**Name of Pest**	**Dose**	-	-	-
Agriculture land & Grain storage	Rats & Soil insects	-	-	-	-
Spinetoram 11.70% SC					
Cotton	Thrips	50.0	420	500-1000	30
	Tobacco caterpillar, Spotted boll worm	50.0-56.0	420-470	500-1000	30
Soybean	Tobacco caterpillar	54.0	450	500-625	30
Chilli	Thrips, Fruit borer, Tobacco caterpillar	56.0-60.0	470-500	400-500	07
Spinosad 45.00% SC					
Cotton	American bollworm	75.0-100.0	165-220	500	10
Chilli	Fruit borer, Thrips	73.0	160	500	03
Red gram	Pod borer	56.0-73.0	125-162	800-1000	47
Brinjal	Fruit & Shoot borer	73.0-84.0	162-187	500	03
Grapes	Thrips	25 ml/100 lit	250	1000	15
Spinosad 02.50% SC					
Cabbage & Cauliflower	Diamond back moth	15.0-17.50	600-700	500	03
Spiromesifen 22.90% SC					
Brinjal	Red spider mite	96.0	400	500	05

Cotton	White fly & mite	144.0	600	500	10
Apple	European Red Mite & Red spider mite	72 (0.03%)	300	1000	30
Chilli	Chilli Yellow Mite	96.0	400	500 -750	07
Tea	Red spider mite	96.0	400	400	07
Okra (Bhindi)	Red spider mite	96.0-120.0	400-500	500	03
Tomato	Whiteflies & Mites	150.0	625	500	03
Cotton	White fly & mite	144.0	600	500	10
Spirotetramat 15.31% w/w OD					
Chilli	Thrips & Aphids	60.0	400	500	05
Thiacloprid 21.70% SC					
Cotton	Aphid, Thrips, Jassid	24.0-30.0	100-125	500	52
	Whitefly	120.0-144.0	500.0-600.0	500	52
Paddy (Rice)	Stem borer	120.0	500	500	30
Chilli	Thrips	54.0-72.0	225-300	500	05
Tea	Mosquito bug	90.0	375.0	400	07
Brinjal	Shoot & fruit borer	180.0	750.0	500	05
Soybean	Girdle beetle	180.0	750.0	500	17
Apple	Thrips	0.01-0.012%	0.04-0.05%	As per size of tree	30
Thiocyclam Hydrogen Oxalate					
Rice	Stem borer, Leaf folder	500.0	1000	500	30
Thiodicarb 75.00% WP					
Cabbage	Diamond back moth	750.0-1000.0	1000-1330	500	07

Cotton	Bollworms	750.0	1000	500	30
Brinjal	Shoot & Fruit borer	470.0-750.0	625-1000	500	06
Chilli	Fruit borer	470.0-750.0	626-1000	500	06
Black gram	Pod borer (*Maruca* spp.) & (*Helicoverpa* spp.)	468.0-562.0	625-750	375-500	17
Pigeon Pea	Pod Borer	470.0-750.0	625-1000	500	30
Thiamethoxam 30.00% FS					
Cotton	Aphid, whiteflies, Jassids	03.0	10.0	This is used as seed dresser	
Sorghum	Shoot fly	03.0	10.0	This is used as seed dresser	
Wheat	Termites	01.0	3.3	This is used as seed dresser	
Soybean	Shoot fly	03.0	10.0	This is used as seed dresser	
Chilli	Thrips	02.1	7.0	This is used as seed dresser	
Okra (Bhindi)	Jassids	01.7	5.7	This is used as seed dresser	
Maize	Stem Fly	02.4	8.0	This is used as seed dresser	
Sunflower	Jassids, Thrips	03.0	10.0	This is used as seed dresser	
Thiamethoxam 70.00% WS					
Cotton	Aphid, Thrips, Whitefly, Jassids	300.0	430	Use as seed dresser at the time of sowing	
Okra (Bhindi)	Aphids, Jassids	200.0	286	Use as seed dresser at the time of sowing	
Tomato	Aphids, Thrips	420.0	600	Use as seed dresser at the time of sowing	
Sunflower	Jassids, Thrips	280.0	400	Use as seed dresser at the time of sowing	
Wheat	Termite, Aphids	121.0	175	Use as seed dresser at the time of sowing	

Maize	Shoot fly, Aphids	245.0	350	Use as seed dresser at the time of sowing	
Rice (Paddy)	Thrips, Green leaf hopper	105.0	150	Use as seed dresser at the time of sowing	
Thiamethoxam 75.00% w/w SG					
Groundnut	Termite	94.0	125	500-1000	57
Sugarcane	Termite, Early shoot borer	120.0	160	500-1000	230
Rice (Paddy)	Green leaf hopper, Brown plant hopper	113.0	150	Dissolve in 500 ml water and mix with 20 kg sand/ha.	60
Cotton	Jassids & Thrips	94.0	125	50-100 ml/plant	109
Thiamethoxam 25.00% WG					
Rice (Paddy)	Yellow stem borer, Gall midge, Leaf folder, White backed plant hopper, Brown plant hopper, Green leaf hopper, Thrips	25.0	100	500-750	14
Cotton	Jassid, Aphid, Thrips	25.0	100	500-750	21
	Whitefly	50.0	200	500-750	21
Okra (Bhindi)	Jassid, Aphid, Whitefly	25.0	100	500-1000	05
Mango	Hoppers	25.0	100	1000	30
Wheat	Aphid	12.5	50	500	21
Mustard	Aphid	12.5-25.0	50-100	500-1000	21

Tomato	Whitefly	50.0	200	500	05
Brinjal	Whitefly	50.0	200	500	03
Tea	Mosquito bug	25.0	100	400-500	07
Potato	Aphids: ➢ Foliar application ➢ Soil drench	 25.0 50.0	 100 200	 500 400-500	 77 77
Citrus	Psylla	25.0	100	1000	20
Rice-Nursery (Soil Drenching)	Green leaf hopper, Thrips, Whorl Maggot	500.0	2000	250 ml/sq.mtr	86
Tolfenpyrad 15.00% EC					
Cabbage	Diamond back moth, Aphids	150.0	1000	500	05
Okra (Bhindi)	Aphids, Jassids, Thrips, Whitefly	150.0	1000	500	03
Trichlorfon 05.00% GR (The use Trichlorfon shall be completely banned with effect from the 31st December, 2020).					
Castor	Pod borer	2000.0	-	-	-
Groundnut	Red hairy caterpillar	500.0	-	-	-
Wheat	Army worm, Cut worm	750.0	-	-	-
Brinjal, Cabbage, Cauliflower, Cucurbits, Tomato	Fruit and shoot borer	500.0	-	-	-
Brinjal, Cabbage, Cauliflower, Cucurbits, Tomato	Diamond back moth	500.0	-	-	-
Brinjal, Cabbage, Cauliflower, Cucurbits, Tomato	Tobacco caterpillar	750.0	-	-	-

Brinjal, Cabbage, Cauliflower, Cucurbits, Tomato	Red pumpkin beetle	500.0	-	-	-
Trichlorfon 05.00% Dust (The use Trichlorfon shall be completely banned with effect from the 31st December, 2020).					
Castor	Pod borer	2000.0	-	-	-
Groundnut	Red hairy Caterpillar	500.0	-	-	-
Wheat	Armyworm, Cutworm	750.0	-	-	-
Brinjal, Cabbage, Cauliflower, Cucurbits, Tomato	Tobacco caterpillar	750.0	-	-	-
Brinjal, Cabbage, Cauliflower, Cucurbits, Tomato	Fruit and shoot borer, Diamond back moth, Red pumpkin beetle	500.0	-	-	-
Trichlorfon 50.00% EC (The use Trichlorfon shall be completely banned with effect from the 31st December, 2020).					
Castor	Pod borer	2000.0	-	-	-
Groundnut	Red hairy caterpillar	500.0	-	-	-
Wheat	Armyworm, Cutworm	750.0	-	-	-
Brinjal, Cabbage, Cauliflower, Cucurbits, Tomato	Fruit and shoot borer, Diamond back moth, Red pumpkin beetle	500.0	-	-	-
Brinjal, Cabbage, Cauliflower, Cucurbits, Tomato	Tobacco caterpillar	750.0	-	-	-
Triazophos 20.00% EC (The use of Triazophos shall be completely banned with effect from the 31st December, 2020).					
Rice (Paddy)	Stem Borer, Leaf folder, Rice hispa, Green leaf hopper, Brown plant hopper, White backed plant	250.0-500.0	1250-2500	500	40

	hopper				
Triazophos 20.00% WG (The use of Triazophos shall be completely banned with effect from the 31st December, 2020).					
Rice (Paddy)	Stem Borer, Leaf folder, Rice hispa, Brown plant hopper	300.0	1500	500	18
Triazophos 40.00% EC (The use of Triazophos shall be completely banned with effect from the 31st December, 2020).					
Cotton	Whitefly, Bollworms (Pink bollworm and Spotted bollworm)	600.0-800.0	1500-2000	500-1000	21
Rice (Paddy)	Stem Borer, Rice hispa, Leaf folder, Green leaf hopper, Brown plant hopper, White backed plant hopper	250.0-500.0	625-1250	500-1000	40
Soybean	Stem borer, Girdle beetle, Leaf miners	250.0	625	500	30
***Verticillium lecanii* 01.15% WP**					
Cotton	White flies	2500.0 (Formulated)	500 litres of water	-	-
Citrus	Mealy bug	02.50 kg	500-550 L	-	-
***Verticillium lecanii* 01.50% Liquid formulation (Foliar spray)**					
Tomato	White fly (*Bemisia tabaci*)	-	2.0	500	-
Zinc Phosphide 80.00% Powder					
Crop	**Pest organism**		**Dosage**	**Technical**	
For rodent control in field and residential premises (to be used under the supervision of trained personal)	*Rattus rattus, Bandicota bengalensis, Rattus meltade , Tatera indica, Meriones hurrianae, Mus platythrix, Mus musculus, Rattus norvegicus, Mus booduga, Suncus caeruleus*		1.5-2.5% active ingredient in bait	Mix 10 g of Zinc phosphide with 10g of edible oil and then mix with 380g of food material. Keep 10g of poisoned bait at each points.	

Combination Product					
Acephate 50.00%+Bifenthrin 10.00% WDG					
Cotton	Leaf hopper, Thrips, Bollworms	400.0+80.0	800	500-750	20
Acephate 25.00%+Fenvalerate 03.00% w/w EC					
Cotton	American bollworm, Sucking pest	500.0+60.0	2000	500	15
Acephate 50.00%+Imidacloprid 01.80% SP					
Cotton	Aphid, Jassids, Thrips, Whitefly, Bollworms	518.0	1000	500	40
Acetamiprid 00.40%+Chlorpyriphos 20.00% EC					
Paddy (Rice)	Stem borer, Brown plant hopper, White backed plant hopper	10.0+500.0	2.50	500-800	10
Acetamiprid 01.10%+Cypermethrin 05.50% EC					
Cotton	Aphids, Jassids, Thrips, Bollworms	10.0+50.0	1000	400-1000	30
Beta-cyfluthrin 08.49%+Imidacloprid 19.81% OD					
Brinjal	Aphids, Jassids, Shoot & fruit borer	15.75+36.75-18.0+42.0	175-200	500	07
Bifenthrin 03.00%+Chlorpyriphos 30.00% w/w EC					
Paddy (Rice)	Stem borer, Leaf folder	24.0+240.0-30.0+300.0	800 -1000	500	21
Buprofezin 09.00%+Acephate 24.00% w/w WP					
Rice (Paddy)	Brown plant hopper	54.0+144.0	600	500	20

Buprofezin 15.00%+Acephate 35.00% w/w WP					
Paddy (Rice)	Brown plant hopper, White backed plant hopper	187.5+437.5	1250	500	20
Buprofezin 20.00%+Acephate 50.00% w/w WP					
Paddy (Rice)	Stem Borer, Leaf folder, Brown plant hopper	200.0+500.0	1000	500	20
Buprofezin 22.00%+Fipronil 30.00% SC					
Rice (Paddy)	Brown plant hopper	110.0+15.0	500	400 – 500	32
Buprofezin 23.10%+Fipronil 03.85% w/w SC					
Rice	Brown plant hopper	173.25+28.88	750	500	30
Cartap Hydrochloride 50.00%+Buprofezin 10.00% w/w WP					
Rice	Yellow stem borer, Brown plant hopper, Leaf folder, Green leaf hopper, White backed plant hopper	480.0	800	500	20
Cypermethrin 10.00%+Indoxacarb 10.00% w/w SC					
Cotton	Jassids, Thrips, Bollworms	50.0+50.0	500	400-1000	07
Cypermethrin 3.0%+Quinalphos 20.0% EC					
Brinjal	Shoot & Fruit borer	-	350-400	500-600	07
Cotton	American bollworm, Spotted bollworm, Jassids	-	1000-1250	500-600	15
Chlorpyrifos 50.00%+Cypermethrin 05.00% EC					

Cotton	Aphid, Jassids, Thrips, Whitefly, *Spodoptera litura*, Spotted bollworm, Pink bollworm, American bollworm	500.0+50.0	1000	500-1000	15
Rice (Paddy)	Yellow stem borer, Leaf folder	312.0+32.0-375.0+38.0	625-750	500-700	15
Chlorpyriphos 16.00%+Alphacypermethrin 01.00% EC					
Cotton	Spotted bollworm, Pink bollworm, American bollworm	425.0	2500	500-750	15
Deltamethrin 00.72%+Buprofezin 05.65% w/w EC					
Rice (Paddy)	Brown plant hopper, Leaf folder	0.78+62.50-0.94+75.00	1250+1500	500	30
Deltamethrin 01.00%+ Triazophos 35.00% EC (The use of Triazophos shall be completely banned with effect from the 31st December, 2020).					
Cotton	Spotted bollworm, Pink bollworm, American bollworm, Whitefly	10.0+350.0-12.50+450.0	1000-1250	600-1000	21
Brinjal	Shoot & fruit borer, Jassids, Aphid, Epilachna beetle	10.0+350.0-12.50+450.0	1000-1250	500	03
Diafenthiuron 47.00%+Bifenthrin 09.40% w/w SC					
Cotton	Thrips (*Thrips tabaci*), Leaf hopper (*Amrasca devastans*), Whitefly (*Bemisia tabaci*), Aphid (*Aphis*	293.75+58.7	625	500	30

	gossypii)				
Chilli	Thrips (*Scirtothrips dorsalis*), Aphids (*Aphis gossypii*)	293.75+58.7	625	500	07
Emamectin Benzoate 01.50%+Fipronil 03.50% SC					
Chilli	Thrips, Fruit borer	07.5+17.5-11.25+26.25	500-750	500	03 (day) or 48 (Hrs) Re-entry period after each application
Ethion 40.00%+Cypermethrin 05.00% w/w EC					
Cotton	American bollworm	400.0+50.0	1000	500	15
Ethiprole 40.00+Imidacloprid 40.00% WG					
Rice (Paddy)	Brown plant hopper	37.50+37.50	93.75	375	15
	White backed plant hopper	50.0+50.0	125	375	15
Fenobucarb 20.00%+Buprofezin 05.00% w/w SE					
Paddy (Rice)	Brown plant hopper, Green leaf hopper	400.0+100.0	2000	500	30
Flubendiamide 04.00%+Buprofezin 20.00% w/w SC					
Paddy (Rice)	Yellow stem borer, Leaf folder, Brown plant hopper	35.0+175.0	175+700	500	30
Flubendiamide 03.50%+Hexaconazole 50.00% w/w WG					
Paddy (Rice)	Stem borer, Leaf older	35.0+50.0	1000	500	20
Flubendiamide 19.92%+Thiacloprid 19.92% w/w					
Chilli	Thrips, Fruit borer	48.0+48.0-	200-250	500	05

		60.0+60.0			
Fipronil 40.0%+Imidacloprid 40.0% WG					
Sugarcane	White grub (*Holotrichia consanguinea*)	175.0+175.0-200.0+200.0	437.5-500	1000-1250	296
Fipronil 04.00%+Acetamiprid 04.00% w/w SC					
Cotton	Aphid, Jassids, Whitefly	40.0+40.0	1000	500	30
Fipronil 07.00%+Hexythiazox 02.00% w/w SC					
Chilli	Mites and Thrips	70.0+20.0	1000	500	07
Rice (Paddy)	Brown plant hopper, Green leaf hopper, White backed plant hopper	44.0+44.0	1100	500	45
Imidacloprid 18.50%+Hexaconazole 01.50% FS					
Groundnut	Termites, Thrips, Jassids, Root grubs, Collar rot, Stem rot, Tikka leaf spot & Rust	37.0+3.0	200	Not applicable	This is used as seed dresser
Wheat	Termites, Aphids, Smut, Rust	37.0+3.0	200	Not applicable	This is used as seed dresser
Imidacloprid 06.00%+Lambda-cyhalothrin 04.00% SL					
Paddy	Stem borer, Hispa, Plant hopper, Gandhi bug	18.0+12.0	300	500	10
Indoxacarb 14.50%+Acetamiprid 07.70% w/w SC					

Cotton	Jassids, Whitefly, Bollworms	88.8-111.0	400-500	500	30
Chilli	Thrips, Fruit borer	88.8-111.0	400-500	500	05
Novaluron 05.25%+ Indoxacarb 04.50% SC					
Tomato	Fruit borer & Leaf eating caterpillar	43.31+37.13-45.94+39.38	825-875	500	05
Phosphamidon 40.0% (The use of Phosphamidon shall be completely banned with effect from the 31st December, 2020)**+Imidacloprid 2.0% SP**					
Paddy	Brown plant hopper, Green leaf hopper, Stem borer	252.0-294.0	600-700	750	22
Profenofos 40.00%+Cypermethrin 04.00% EC					
Cotton	Bollworm complex	440.0-660.0	1000-1500	500-1000	14
Profenofos 40.00%+Fenpyroximate 02.50% w/w EC					
Chilli	Thrips, Mites, Fruit borer	0.4+0.025	1000	500	07
Pyriproxyfen 05.00%+Fenpropathrin 15.00% EC					
Cotton	Whitefly, Bollworms	25.0+75.0-37.5+112.5	500-750	500-750	14
Brinjal	Whitefly, Shoot & fruit borer	25.0+75.0-37.5+112.5	500-750	500-750	07
Okra (Bhindi)	Whitefly, Fruit borer	25.0+75.0-37.5+112.5	500-750	500-750	07
Chilli	Whitefly, Fruit borer	25.0+75.0-37.5+112.5	500-750	500-750	07
Pyriproxyfen 05.00%+Diafenthiuron 25.00% SE					

Cotton	Whitefly (*Bemisia tabaci*), Thrips (*Thrips tabaci*), Jassid (*Amrasca biguttula biguttula*), Aphid (*Aphis gossypii*)	250.0+50.0-312.5+62.50	1000 – 1250	500	35
Pyriproxyfen 05.00%+Fenpropathrin 15.00% EC					
Cotton	Whitefly	60.0+60.0	600	500	19
Pyriproxyfen 10.00%+Bifenthrin10.00% w/w EC					
Cotton	Whitefly	60.0+60.0	600	500	19
Spirotetramat 11.01%+Imidacloprid 11.01% w/w SC					
Okra (Bhindi)	Red spider mites	60.0+60.0	500	500	03
Brinjal	Whitefly, Red spider mites	60.0+60.0	500	500	05
Thiamethoxam 12.60%+Lambda-cyhalothrin 09.50% ZC					
Cotton	Jassids, Aphids, Thrips, Bollworms	44.0	200	500	26
Maize	Aphid, Shoot fly, Stem borer	27.50	125	500	42
Groundnut	Leaf hopper, Leaf eating caterpillar	27.5	150	500	28
Soybean	Stem fly, Semilooper, Girdle beetle	27.50	125	500	48
Chilli	Thrips, Fruit borer	33.0	150	500	03
Tea	Tea mosquito bug, Thrips, Semilooper	33.0	150	400	01

Tomato	Thrips, Whiteflies & Fruit borer	27.5	125	500	05
Acetamiprid 00.40%+Chlorpyriphos 20.00% EC					
Paddy (Rice)	Stem Borer, Brown plant hopper & White backed plant hopper	10.0+500.0	2.5	500-800	10
Cypermethrin 10.00%+Indoxacarb 10.00% SC					
Cotton	Jassids, Thrips, Bollworms	50.0+50.0	500	400-1000	07
Chlorantraniliprole 09.30%+Lambda-cyhalothrin 04.60% ZC					
Pigeon pea	Pod borer	30.0	200	500	18
Cotton	Bollworms complex	37.50	250	500	20
Chlorantraniliprole 00.50%+Thiamethoxam 01.00% w/w GR					
Rice	Stem borer, Leaf folder, Brown plant hopper, Green leaf hopper	30.0+60.0	6 kg/ha	-	60
Chlorantraniliprole 08.80%+Thiamethoxam 17.50% w/w SC					
Tomato	Leaf Miner, Whitefly, Fruit borer	150.0	500 **Application method**-Soil drench (Single application), **Application time**-8-10 days after transplanting	50-100 ml/plant	36
Thiamethoxam 00.90%+Fipronil 00.20% w/w GR					
Ground nut	White grub, Termite	108.0+24.0-135.0+30.0	12.15	106	48

Public Health Use

Pest	Habitat	a.i. (mg/m^2)	Formulation (gm)	Dilution (Ltr.)
Alphacypermethrin 05.00% WP				
Adult Mosquito	-	25 (2 cycles application to repeat after 3 month)	Dilute 250 gm of Alphacypermethrin5% WP in 10 litres of water to cover 500 sq m area.	250
	-	40 (single cycle application)	Dilute 250 gm of Alphacypermethrin 5% WP in 10 litres of water to cover 500 sq m area.	400
Alphacypermethrin Impregnated long lasting nets 00.667% w/w (200 mg/m^2) (For Import only)				
Ready to use Impregnated Bed Net		To control mosquitoes under Public Health		
Pest	**Habitat**	**a.i. (gm)**	**Formulation (gm)**	**Surface**
Azadirachtin 00.15% EC				
Mosquito larvae	Stagnant water, Drainage, Water puddle	1 .0	1 .0	10.7 m^2
	Iron containers, Machinery scraps, Iron box, Iron tanks	05.0	05.0	53.6 m^2
	Plastic scraps, Pit.	933.3	933.3	1 hectare
***Bacillus sphaericus* 1593 M Sero Type H 59 5B**				
Anophles sp. *Culex* sp.	For Drains, Cesspits Cesspools, paddy fields, ponds. Camsuarina pits, unused wells, unused overhead tanks, Domestic wells (Not for drinking requirements)	112	1.0 ltr/10 ltr of water	-

***Bacillus thuringiensis* var. israelensis 00.50%WP**					
Mosquito spp.	Anopheles, Culex and Aedes (Habitat-Cement tank, Coolers, Drains, Pool pits, Highly polluted underground tanks, Container drums & Tyres.)	0.75 mg/m^2	-	200	-
***Bacillus thuringiensis* var. israelensis 05.00%WP**					
Mosquito spp.	Anopheles, Culex and Aedes (Habitat-Cement Tank, Coolers, Drains, Pool pits	0.75 g/m^2	7.50 kg/ha.	200 L	-
	Highly polluted water (underground tanks, Container Drums and Tyres.)	1.00 g/m^2	10.00 kg/ha	200 L	-
***Bacillus thuringiensis* var. israelensis WP**					
Name of insect		**Dosage/ha**		**Interval between application**	
		a.i. (gm)	**Formulation (Kg.)**		
Anopheles and *Culex* sp. (larvae)		-	2-5 kg/ha.	2-4 weeks	
***Bacillus thuringiensis* var. israelensis, Serotype H-14 (VECTOBAC 12 AS) Potency 1200 ITU / MG (VCRC Serotype H-14 strain**					
Culex	Drains, Cesspits Casuarina pits, Disused wells	5.0 litres.	1 liter in 100 liters of water	-	
Anopheles	Paddy fields, Ponds, pools	10.0 litres.	1 liter in 50 liters of water	-	
Aedes	Tree holes, disused tyres	10.0 litres.	1 liter in 50 liters of water	-	

Culex	Drains, Cesspits Casuarina pits, Disused wells	5.0 litres.	1 liter in 100 liters of water	-	
Bifenthrin 10.00%WP					
Adult Mosquito	-	25 (2 rounds of spraying 3 months apart	125	Dilute 125 gm of Bifenthrin 10% WP in 10 liters of water to cover 500 m^2 areas.	-
***Bacillus thuringiensis* var. israelensis 12.00% AS (Vectobac)**					
Anopheles sp.	Clean water, cement tanks	1-2 ltrs.	-	-	-
Culex sp.	Polluted water, cess pits, cement tanks, stagnant and flowing drains	2-4 ltrs.	-	-	-
Chlorpyriphos Methyl 40.00% EC					
Used to control of adult vector mosquitoes	-	-	-	-	-
Cyfluthrin 10.00% WP					
Under Public Health Programme (Adult Mosquitoes)	-	25 (2 cycles application to be Repeated after 3 months.	250	Dilute 250 gm of Cyfluthrin 10% WP in 10 litres of water to cover 500 m^2 areas.	-

	-	40 (single cycles application)	400	Dilute 400 gm of Cyfluthrin 10% WP in 10 litres of water to cover 500 m^2 areas.	-
DDT 50% WP					
Adult mosquitoes	-	1-2gm	-	-	-
Deltamethrin 00.15% + Piperonyl 00.55% EC					
Adult mosquitoes	-	Mosquitoes control under Public Health	-	-	-
Deltamethrin 01.25% w/w or 01.00% w/v EC					
Insect	**Method of Application**	**Dosage/ha.**			
		a.i. (gm)	**Formulation (ml)**	**Dilution in diesel Oil (Litre)**	
Adult Mosquitoes	Thermal fogging	0.50	50.0	10.0	
	Ultra low volume application	0.50	50.0	0.50	
Deltamethrin 02.50 % WP					
Adult Mosquitoes	For public health purpose only	625-1250 mg/50 m^2	25-50 g/50 m^2	1.5-2.5 Ltr./50 m^2	
Deltamethrin impregnated Bed Net 55 mg/m^2 (For Import only)					
Ready to use insecticide Impregnated Bed net			Mosquitoes control under Public Health		
Diflubenzuron 02.00% GR					

Name of the insect pest	**Habitat**	**Dosage/ha (Kg.)**	**-**	**Waiting period**
Mosquito larvae	Water bodies (Cess pits, Drains, Disused wells and Pools)	1.25-3.0	-	-
Fenitrothion 40.00% WP				
Common name of pest	**a.i. (gm)**	**Formulation**	**-**	**Dilution in water (litres)**
Mosquitoes & files	400	1000	-	80
Lambda-cyhalothrin 10.00% WP				
Pest	**Use**	**Dosage 500 m^3 floor area**		**Dilution in water (Litre)**
		a.i. (gm)	**Formulation (gm)**	
Mosquitoes	For public health only	7.50-15.0	75-150	10
Malathion 25.00% WP				
Crop	**Common name of the pest**	**Dosage/m^2**		**Waiting Period (days)**
		a.i. (gm)	**Formulation (gm)**	**Dilution in water (Liter)**
-	Adult mosquitoes	02/m^2	08/m^2	100	Repeat after 6-8 weeks
Novaluron 10.00% EC				
Place of Application	**Insect**	**Dosages**		**Waiting Period**
		a.i. (gm)	**Formulation (ml)**	

Clean surface water	*Anopheles stephensi, Aedes aegypti*	30.0	0.03 ml/m^2	-
Polluted surface water	*Culex quinquefasciatus,* *Anopheles subpictus*	60.0	0.06 ml/m^2	-
Pyriproxyfen 00.50% GR.				
Breeding habitats		**Dosage/ha**		**Interval between application**
		a.i. (gm)	**Formulation (Kg.)**	
Clean water/Domestic containers		10.0 (0.01ppm)	2.00	08 weeks
Polluted/ Peri-domestic breeding habitat		20.0 (0.02ppm)	4.00	08 weeks
Pirimiphos methyl 50.00% EC				
Location	**Name of the pest**	**Dosage**	**-**	**Waiting period**
Mosquito breeding surface	Mosquito larvae	25 ml/ha	-	-
Temephos 50.00% EC				
Regime of application	**Common name of pest**	**Dosage/ha**		**Waiting period (days)**
		a.i. (g)	**Formulation (ml)**	
Mosquito larval treatment area ponds, swamps, drainage ditches, canals and other Breeding areas.	Mosquitoes larvae	37.5-125.0	75-250	200

Household Insecticides

Alphamethrin 0.1% w/w (RTU)		
Common name of pest	**Dose/m^2 (a.i./mg)**	**Formulation (ml)**
Cockroaches, Adult mosquitoes, Adult houseflies	25.0-50.0	25-50
Alphacypermethrin 00.50% Chalk		
Ready to use household insecticides	To control cockroaches	
Allethrin 00.50% Coil		
Ready to use household insecticides	Used to control of house hold flying insect like houseflies and mosquitoes	
Allethrin 00.50% Mosquito Coil		
Ready to use household insecticides	To control of adult mosquitoes	
Allethrin 00.20% Coil Adult Mosquitoes		
Ready to use household insecticide	To control of mosquito	
Allethrin 00.50% Coil Adult Mosquitoes		
Ready to use household insecticide	To control of mosquito	
Allethrin 04.00% Mat Adult Mosquitoes		
Ready to use household insecticide	To control of mosquito	
Allethrin 05.00% Aerosol		
Ready to use household insecticide	To control of mosquito	
Allethrin 03.60% LV		
Ready to use household insecticide	To control of mosquito	
Bifenthrin 00.05% Mosquito coil (8 hours Min.)		
Ready to use household insecticide	Used to control adult mosquitoes	

Cyfluthrin 10.00% WP			
Common name of pest	**Dosage**		**Use**
	a.i. in mg/m^2	**Formulation (gm/m^2)**	
Adult mosquitoes, Cockroaches, House flies & Mosquitoes in house	25.0	0.250 for each spray	100 gm of Cyfluthrin 10% WP to be diluted in 8 liters of potable water 40 gm of Cyfluthrin 10% WP to be diluted in 10% litres water.
	20.0	0.200 for each spray	100 gm of Cyfluthrin 10% WP to be diluted in 8 liters of potable water 40 gm of Cyfluthrin 10%WP to be diluted in 10% litres water.
Cyfluthrin 10% WP			
For house hold use Cockroach Housefly Mosquitoes	25.0-40.0	250-400	Dilute 250-400 gm of Cyfluthrin 10% WP in 10 litres of water to cover 500 m^2 areas.
Chlorpyriphos 02.00% w/w EC			
Ready to use household insecticides		Used for protecting wood from the attack of termites & borers.	
Chlorpyriphos Methyl 40.00% EC			
Used to control adult mosquitoes			
Cyphenothrin 07.20% VP w/w (For use by pest control operator only)			
American Cockroaches & German Cockroaches		To control of American Cockroaches & German Cockroaches (In house)	
Cypermethrin 03.00% Smoke Generator			
Ready to use household insecticide.		To control Cockroaches in house, hotels & warehouse.	
Cypermethrin 01.00% Dust			

Ready to use household insecticide.			To control Cockroaches in house.		
Cypermethrin 01.00% Chalk					
Ready to use household insecticide.			To control Cockroaches in house.		
Cyfluthrin 05.00% EW					
Ready to use	Cockroaches, House flies, mosquitoes, in-house. Bed net impregnation	8.0 ml	1.0	50 ml diluted solution/m^2	
Cyfluthrin 00.025% + Transfluthrin 00.04% Aerosol					
Ready to use			Used for controlling /repelling Mosquitoes. Houseflies & cockroaches in homes.		
Deltamethrin 02.50% Flow					
Name of insect pest	**Type of use**	**Dosage /m^2 area of bed net**		**-**	**-**
		a.i.	**Formulation**		
Adult Mosquitoes	For impregnation of polyester , nylon and cotton bed net	25 mg	1 ml	-	-
Deltamethrin 02.50% WP					
Name of insect pest	**Habitate**	**Dosage /m^2 area of bed net**			**-**
		a.i.	**Formulation**	**Dilution in water (Liter)**	
Lesser grain borer Rice moth, Saw toothed grain beetle, Red flour beetle, Khapra beetle, Almond moth	Grain and seeds in stacks	30 mg/m^2	1.2 g/m^2	1 Liter for 30 m^2	-
Rice weevil	Grain and seeds in stacks	30 mg/m^2	1.2 g/m^2	1 Liter for 30 m^2	-

	Walls, Ceilings & Floor	30 mg/m^2	1.2 g/m^2	1 Liter for 30 m^2	-
Diflubenzuron 02.00% Tablets					
Name of pest	**Habitat**	**Dosage**		**Dilution in water**	
Mosquitoes larvae	Unused Coolers	0.5-1.0 ppm		0.5-1.0 tablet in 40 liter water	
Diflubenzuron 20.00%+ Deltamethrin 02.00% SC					
Name of the insect pest	**Habitat**	**Dosage/ha (kg.)**		**Waiting period**	
House fly maggot	Poultry Manure & kitchen garbage	1.50-2.00 ml/liter water (5 litre of water /10 m^2		-	
Diflubenzuron 25.00% WP					
Name of pest	**Habitat**	**Dosage**		**Dilution in water**	
Mosquitoes larvae	Clean surface water	25.0-50.0 g a.i./ha		-	
	Polluted surface water	50.0-100.0 g a.i./ha		-	
	Sewage pits, Soak pits, Latrines, Septic tanks	01.0 mg a.i./liter		-	
House fly maggots control	In poultry manure garbage, filth & dumping areas	5.0 gm/10 m^2		05 liters water/10 m^2	
Deltamethrin 00.05% + Allethrin 00.04% w/w EC					
Common name of house hold insect		**Dosage/ha**			
		g a.i.		**Formulation (ml)**	
Cockroaches, House flies, Mosquitoes		12.5-25.0		25.0-50.0	
Deltamethrin 02.50%+D-trans allethrin 02.00% w/w EC					
Insects		**Dosage/m^2**			

	a.i. (mg)	Quantity of solution (ml)
Cockroach, Houseflies, Mosquitoes	12.5-25.0 + 10.0-20.0	25.0-50.0
Deltamethrin 00.02% + Allethrin 00.13% w/w		
Ready to use	To control cockroaches, mosquitoes and flies	
Deltamethrin 00.50% w/w Chalk		
Ready to use household insecticide	To control Cockroaches, ants and bedbugs	
D-Trans Allethrin 00.10% + Permethrin 00.03% + Imiprothrin 00.02% Aerosol w/w (all Insect Killer Aerosol)		
Ready to use	To control cockroaches, mosquitoes and house flies	
Deltamethrin 01.00% RTU		
Ready to use household insecticide	To control Cockroaches in house. One litre of insect control of paints sufficient for an area of 22 sq. meters. Two coats of insect control paint are recommended giving 18 hours of drying between the coats.	
D-Trans Allethrin 02.00% Mosquito Mat		
Ready to use household insecticide.	To control Adult Mosquitoes in house.	
D-Trans Allethrin 00.10% w/w Mosquito Coil		
Ready to use household insecticide.	To control and repel of Adult Mosquitoes in the house.	
D-Allethrin 21.97 % w/w MOS Mat.		
Used to control Adult Mosquitoes	Open Area like Park, Garden and Farm Houses etc. only.	
Emamectin Benzoate 00.10% w/w Gel		

Name of Insect/Pest	**Dose (g a.i.)**	**FormulationDose**	**Application Usages**
American Cockroach	0.001 g a.i./m^2	1.0 gm of Gel Bait/m^2 (2-5	Place “Ready to Use Gel Bait” (RB) for use as spot or cracks and crevices treatment in

(*Periplaneta americana*)		spots)	residential institutional, commercial and industrial areas e.g. application at or near harborage or aggregation areas, such as corners, areas where cockroaches forage or crack and crevices, holes, hidden surfaces, any other places where cockroaches are typically known to hide etc. for the control of cockroaches.
German Cockroach (*Blattella germanica*)	0.001 g a.i./m^2	1.0 gm of Gel Bait/m^2 (1-2 spots)	Place "Ready to Use Gel Bait" (RB) for use as spot or cracks and crevices treatment in residential institutional, commercial and industrial areas e.g. application at or near harborage or aggregation areas, such as corners, areas where cockroaches forage or crack and crevices, holes, hidden surfaces, any other places where cockroaches are typically known to hide etc. for the control of cockroaches.

Fenitrothion 20.00% OL			
Name of Pest	**Dose (g a.i.)**	**Formulation (ml)**	**Instruction for use**
Bedbug (*Cimex* spp.)	2.0	10.0	Take 10 ml of BILFOL 20 and dilute in 200 ml of kerosene. Apply spot spray thoroughly in all bed bug infested areas like charpoy furniture etc. taking care that the spray is the directed into cracks and crevices where bedbugs are hiding. 200 ml of spray wash will approx cover 10 m^2 it can also be applied with a brush where ever bedbugs occur.

Fipronil 00.03% & 0.5% Gel	
Ready to use household insecticide	Used to control of German & American Cockroaches.
Fipronil 00.05% GEL	

House hold	**Common name of the pest**	**Dosage/m^2**
House hold	American Cockroach (*Periplanata americana*), German cockroach (*Blattella germanica*)	0.03 g (in a bait gun), 3-4 spot/m^2
Imiprothrin 00.10%+Cyphenothrin 00.13% w/w		
Ready to use		Used for controlling cockroaches in homes.
Imiprothrin 00.70%+Cypermethrin 00.20% w/w Aerosol		
Ready to use household insecticides		Used against Cockroaches.
Imiprothrin 00.05%+Cypermethrin 01.00% CL		
Ready to use		Used for controlling cockroaches in houses.
Imidacloprid 00.03% w/w Gel		
Species		**Recommended Dose**
Pharaoh ant (*Monomorium pharaonis*), Small black ant (*Monomorium indicum*), Crazy ant (*Paratrechina longicomis*), Ghost ant (*Tapinoma melanocephalum*)		Low infestation level (one spot of 200 mg/m^2 of infested area). Moderate to high infestation level (one spot of 300 mg/m^2 of infested area).
Scoring of ant activity will be done based on the following: ➢ Low activity=1-50 ants passing from a given point in the time period of one minute. ➢ Medium activity=51-200 ants passing from a given point in the time period of one minute. ➢ High activity= 201 ants passing from a given point in the time period of one minute.		
Imidacloprid 02.15% w/w Gel		
Ready to use household insecticide		Used to control of German & American Cockroaches
Imidacloprid 21.00%+Beta-cyfluthrin 10.50% w/w SC		
Name of Insect pests	**Places**	**Dosage**
American Cockroaches,German Cockroaches	Private Houses, Factories, Offices, Market places, Restaurants, Hotels, Shops, Ships, Hospital etc.	Diluter 04 ml of Imidacloprid 21.0% w/w + Beta-cyfluthrin 10.5% w/w SC with 01 L of water. Apply 50 ml of this solution to spray per square meter area or apply 01 L of this

		solution to cover 20 square meter area	
Lambda-cyhalothrin 00.50% Chalk			
Ready to use household insecticides		Used to control Cockroaches.	
Lambda-cyhalothrin 02.43% CS			
Purpose and target pest	**Dosage/m^2 of netting**		
	a.i. (mg)	**Concentration of spray fluid**	**Quantity of spray fluid (ml)**
Impregnation of bed nets to prevent attack from mosquitoes	10.0	0.05%	800-1000 (depending on the type of the net)
Lambda-cyhalothrin 02.43% CS			
Common Name of pest	**Dosage**		
Adult mosquitoes, Adult house flies, Cockroaches	20-30 mg/m^2	10-15 ml/litres of water to cover 50 m^2 area	
Lambda-cyhalothrin 02.43% CS			
Target insect	**Dosage**		
	Mg a.i./m^2	**Method of application**	
Non-porous surfaces – Mosquitoes, House flies & Cockroaches	12.50	Mix 20 ml of product in 1 liter of water & spray the solution uniformly @ 25 ml/m^2 on non porous & @ 50 ml/m^2 on porous surfaces.	
Porous surfaces – Mosquitoes House flies & Cockroaches	25.0	Mix 20 ml of product in 1 liter of water & spray the solution uniformly @ 25 ml/m^2 on non porous & @ 50 ml/m^2 on porous surfaces.	
Lambda-cyhalothrin 02.43% CS			
Name of pest	**Dosage/m^2**		
	a.i. (mg)	**Formulation (ml)**	**Dilution in water**

Cockroaches	50	1.0	Dissolve 500 ml of formulated material in 10 litre water to cover 500 square meter area.
Housefly, Adult mosquitoes	0.2	0.004	Dissolve 4 ml of formulated material in 20 litre water to cover 1000 square meter area.
Indoor			
Anopheles stephensi, Culex quinquefasciatus, Aedes aegypti	0.5	0.01	Dissolve 5 ml of formulated material in kerosene to cover 500 square meter area.
Outdoor			
Anopheles stephensi, Culex quinquefasciatus, Aedes aegypti	3.5	70.0	Dissolve 70 ml Formulation in kerosene to cover 1 hectare area.
Malathion 02.00% House Hold Spray			
Ready to use		To control of Bed, Bugs, Flies, Ants, Gnats, Mosquitoes, Moths and Cockroaches in houses.	
Metofluthrin 00.005% (Mosquito Coil)-Min. 07 Hrs. Burning time			
Ready to use household insecticide.		To control of mosquitoes in houses.	
Permethrin 02.00% (Olyse t@ Net) w/w for Import only			
Ready to use household insecticides		For control of mosquitoes both indoors and outdoors. After unpacking and before using the new bed net, keep it in and open place for 12 hrs away from the sunlight.	
Propetamphos 01.00% Spray			
Ready to use household insecticide		To control of Cockroaches, Bed bugs, Flies, fleas, Mosquitoes & Silverfish.	
Propoxur 00.75%+Cyfluthrin 00.025% Aerosol			

Ready to use household insecticide		Cockroaches, Mosquitoes & Houseflies	
Propoxur 20.00% EC			
Common name of pest	**Dose (g a.i.)**	**Formulation (ml)**	**Dilution in water (litres)**
Flying insect- Mosquitoes, Files, Cockroaches , Bed bugs, Flash, Ticks crickets , Woodlice , Mite, Silver fish, Spider, Ants etc.	200	1000	40
Pirimiphos-methyl 01.00% Spray			
Location	**Pest**	**Dosage**	**Exposure period (min. hrs.)**
Spot spray in houses	Cockroaches , bed bugs, flea etc.	100 ml/1 m^2	01
Space spray in houses	Mosquitoes, houseflies	50 ml/100 m^3	01
Pyrethrin 00.05%+Malathion 01.00%			
Insects		Used to control of Cockroaches, Mosquitoes and Flies	
Propoxur 02.00% Bait			
Ready to use household insecticides		Used to control of Cockroaches and Flies	
Pyrethrin 00.20% w/w			
Ready to use household insecticide		To control of Cockroaches, Houseflies and Mosquito	
Propoxur 01.00% Spray			
Ready to use household insecticide		Used to control of Cockroaches, House flies and Adult Mosquitoes	
Prallethrin 01.00% w/w Red Mosquitoes Mat			
Ready to use household insecticide.		Used to control of adult mosquitoes	

Prallethrin 00.04% Coils (Min.11Hrs)			
Ready to use household insecticide		Used to control mosquitoes in Houses	
Prallethrin 00.04% Coils (Min.6 Hrs)			
Ready to use household insecticide		Used to control mosquitoes in Houses	
Prallethrin 00.80% w/w Red Mosquitoes Mat			
Ready to use household insecticide.		Used to control of Mosquitoes.	
Prallethrin 00.50% w/w Mosquitoes Coil			
Ready to use household insecticide.		Used to control of adult mosquitoes.	
Prallethrin 01.20% Mat			
Ready to use household insecticide.		Used to control of adult mosquitoes.	
Prallethrin 00.04% w/w Mosquito Coil			
Ready to use household insecticide.		Used to control of adult mosquitoes.	
Prallethrin 19.00% w/w VP			
Ready to use household insecticide.		Used to control of adult mosquitoes.	
Prallethrin 02.40% w/w Liquid			
Ready to use household insecticide.		Used to control of Mosquitoes.	
S-Bioallethrin 02.40% Mosquitoes Mat			
Ready to use household insecticide.		Used to control of adult mosquitoes.	
Thiamethoxam 00.01% w/w Gel Bait			
Common Name of the Insect/Pest	**Dose (g a.i.)**	**Formulation Dose**	**Application/Usage**
Black Carpenter Ants (*Camponotus* spp.)	0.0001 g.a.i. per spot (2-4 spots per square meter)	1.0 gm of gel bait per spot (2-4 spots per square meter)	Locate the ant trails or location where ants are most active. Place" Ready to Use Gel Bait" (RB) for controlling ants for use as spot or cracks and crevices treatment in residential,

			Institutional, commercial and industrial areas e.g. application at or near harborage or aggregation areas, such as corners areas where ants forage or crack and crevices, holes, hidden surfaces any other places where ants are typically known to hide.
Transfluthrin 00.88% & 01.60% Liquid Vaporizer			
Ready to use household insecticide.		Used to control of Adult Mosquitoes and House fly.	
Transfluthrin 01.60% Liquid Vaporizer (For 30 Nights (25 ml)			
Ready to use household insecticide.		Used to control of Adult Mosquitoes.	
Transfluthrin 20.00% w/w MV Gel			
Ready to use household insecticide.		Used to control of Mosquitoes in the house.	
Transfluthrin 00.03% w/w Mosquito Coil			
Ready to use household insecticide		Used for controlling/repelling of Mosquitoes in the house	
Transfluthrin 01.00% EU (Smoke generator)			
Use / recommendation		It is used for controlling/repelling adult mosquitoes in the houses (Effective for 6 hrs.)	
Transfluthrin 01.20% Liquid Vaporizer (For 60 Nights (45 ml) & 90 nights (67 ml.)			
Ready to use household insecticide		Used to control of adult mosquitoes	
Transfluthrin 12.00% AE			
Ready to use household insecticide.		Used to controlling/ repelling of adult mosquitoes in the houses (effective for 12 hours)	
Zinc Phosphide 01.00% bait (Household Product)			
To be ready to use household insecticide		To control Rats	

Ad-hoc approval for Fall Army Worm, (Up to 30, June, 2020)		
Sr. No.	**Molecule**	**Dose/ha (ml/g a.i.)**
1.	Chlorantraniliprole 9.3% + Lambda-cyhalothrin 4.6% ZC	35 (23.42 + 11.58) g.a.i/ha
2.	Cyantraniliprole 19.8% + Thiamethoxam 19.8% FS	2.38 g.a.i/kg seed (1.19+1.19)
3.	Spinetoram 11.7% w/w SC	30 g.a.i/ha
4.	Chlorantraniliprole 18.5% SC	40 g.a.i/ha
5.	Emamectin benzoate 5 % SG	200 g a.i./ha
6.	Emamectin benzoate 5% + Lufenuron 40% WG	36 g.a.i/ha
7.	Thiodicarb 75% WP	750 g.a.i/ha
8.	Novaluron 5.25% + Emamectin benzoate 0.9% w/w SC	78.75+13.5 g.a.i/ha
9.	**Bio-pesticide as below-** *Metarhizium anisopliae, Metarhizium rileyi* (*Nomuraea rileyi*), *Beauveria bassiana, Verticillium lecanii*	1 × 108 CFU/g @ 5 g/litre whorl application. Repeat after 10 days if required.
10.	*Bacillus thuringiensis* ver. *Kurstaki*, NPV	@ 2 g/l (or) 400 g/acre.

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