

Statistics

Spraying Schedule Herbicides

Sr. No.	Herbicide	Crops	Weed Species	Dose a.i. / ha
I	II	III	IV	V
1.	Alachor	1. Cotton	1. Echinochloa Spp.	2.0 - 2.25 Kg
		2. Maize	2. Euphorbia Hirta	2.5 kg
		3. Groundnut	3. Phyllanthus Niruri	2.5 kg
		4. Soyabean	4. Trianthema Spp.	2.5 kg
		5. Sugarcane	5. Digera Arvensis 6. Portulaca Oleracea 7. Eleusine Spp.	3.75 to 5 Kg
2.	Atrazine	1. Maize	1. Trianthema Spp.	0.5 to 1.0 kg
		2. Sugarcane	2. Digera Arvensis	0.5 to 2.0 kg
		3. Potata	3. Eleusine Spp.	0.25 kg
		4. Bajra	4. Polygonum Spp.	0.05 to 1.0 kg
			5. Echinochloa Spp	
			6. Amaranthus Spp.	
			7. Digitaria Spp.	
			8. Chenopodium Album	
			9. Spergula Arvensis	
3.	Benthiocarb	Paddy	Echinochloa Spp	1.5 kg
4.	Butachlor	Paddy	1. Eleusine Spp.	1.25 to 2.00 kg
			2. Fimbristylis Spp.	
			3. Eleusine Indica	
			4. Cyperus Iria	
5.	Dalapon	1. Tea	1. Cynodon Dactylon	2.5 to 6.0 kg
		2. Rubber	2. Digitaria Spp.	10 Kg
		3. Jute	3. Eleusine Indica	6 to 8 Kg
		4. Mesta	4. Paspalum Spp.	6 to 8 Kg
		5. Forestry	5. Penniselum Spp.	11.0 Kg
			6. Setaria Spp.	
			7. Sorghum Halepens	
6.	Diuron	1. Cotton	1. Amaranthus Spp.	0.75 to 1.5 kg
		2. Tea	2. Chenopodium Album	0.5 to 0.75 kg
		3. Banana	3. Convolvulus Arvensis	1.6 kg
		4. Rubber	4. Digitaria Bifaciculata	1.6 to 3.2 kg
		5. Coffee	5. Portulaca Oleracea	2.00 kg
		6. Citrus	6. Setaria Glaunca	2.0 to 4.0 kg

		7. Sugarcane	7. Xanthium Strumarium	1.6 to 3.2 kg
		8. Grapes	8. Anagallis Arvensis	1.6 kg
		9. Maize	9. Commelina Benghalensis	0.8 kg
		10. Sapor	10. Setaria Sp	
			11. Coronopus Didymus	2 to 4 kg
7.	Fluchloralin	1. Rice	1. Echinochloa Sp.	0.56 to 0.80 kg 0.9 kg direct seeds
		2. Cotton	2. Amaranthus Spp	0.9 to 1.2 kg
		3. Onion	3. Eclipta Alba	0.67 to 0.908 kg
		4. Lady's Finger	4. Cyperus Iria	0.9 to 1.2 kg
		5. Groundnut	5. Trianthema Spp	1.0 kg
		6. Wheat	6. Portulaca Spp	0.255 to 1.0 kg
		7. Potata	7. Panicum Spp	0.45 to 0.67 kg
		8. Brinjal	8. Eleusine Spp	0.9 to 1.35 kg
		9. Soyabean	9. Chenopodium Album	1.0 to 1.5 kg
		10. Cabbage	10. Poa Annua	0.22 to 0.67 kg
		11. Black Gram	11. Chloris Barbata	1.0 kg
8.	Glyphosate	Tea	1. Axonopus Compressus	0.82 to 1.23 kg
			2. Cynodon Dactlyon	
			3. Imperata Cylindrical	
			4. Polygonum Perfoliatum	
			5. Kalm Grass	
			6. Arundinella Benghalensis	
			7. Paspalum Scorbiculatume	
9.	Isoproturon	Wheat	1. Phalaris Minor	0.82 to 1.23 kg
			2. Avena Fatua	
			3. Poa Annua	
10.	MCPA	1. Rice	1. Cyperus Rotundus	0.8 to 2.0 kg
		2. Wheat	2. Ammania Bacifera	1 kg
		3. Sugarcane	3. Ludwigia Parviflora	5 kg
			4. Chenopodium Album	
			5. Fumaria Parviflora	
			6. Carthamus Oxyacantha	
			7. Melilotus Spp.	
11.	Methabenzthiazuron	Wheat	1. Phalaris Minor	Pre-em 1.05 to 1.4 kg
			2. Poa Annua	Post emergence 1.4 to 1.75 kg
				Early post Em. 0.70 to 0.87 kg
			3. Avena Spp.	After 16 to 18 days
			4. Chenopodium Album	

			5. Anagallis Arvensis	
12.	Metoxuron	Wheat	1. Phalaris Minor	1.2 to 1.6 kg
			2. Avena Spp.	
			3. Poa Annua	
			4. Melilotus Alba	
			5. Anagallis Arvensis	
			6. Chenopodium Album	
13.	Paraquat Dichloride	1. Tea	1. Imperata Cylindrical	0.2 to 1.0 kg
		2. Coffee	2. Setaria Spp	0.25 kg
		3. Rubber	3. Clerodendron Spp	0.3 to 0.6 kg
		4. Sugarcane	4. Arundinella Spp	0.5 kg
		5. Cotton	5. Commelina Spp	0.3 to 0.5 kg
		6. Apple	6. Paspalum Spp	0.75 kg
		7. Grapes	7. Chenopodium Album	0.5 kg
		8. Paddy (Minimal tillage)	8. Fumaria Sp.	0.3 to 0.8 kg
		9. Wheat (Minimal tillage)	9. Anagallis Sp.	1 kg
		10. Potota	10. Digitaria Sp.	0.5 kg
14.	Pendimethalin	1. Paddy	1. Echinochloa Spp.	1.0 to 1.5 kg
		2. Wheat	2. Fimbristylis Sp	
			3. Ludwigia Sp	
			4. Cyperus Iria	
			5. Phalaris Minor	
			6. Avena Sp	
			7. Poa Sp	
			8. Chenopodium Sp	
15.	Propanil	1. Rice	1. Echinochloa Spp.	2 to 3 kg
		2. Potato	2. Cyperus Difformis	1.0 kg
			3. Cyperus Iria	
			4. Chenopodium Album	
			5. Melilotus Sp	
			6. Brachiaria Sp	
			7. Fimbristylis Miliacea	
			8. Lathyrus Aphaca	
			9. Argemone Mexicana	
16.	Simazine	1. Maize	1. Trianthema Monogyna	0.5 to 1.0 kg
		2. Fodder Maize	2. Diger Arvensis	0.5 to 1.0 kg
		3. Sugarcane	3. Echinochloa Sp	1.12 kg to 2.24 kg
		4. Tea	4. Eleusine Sp	1.5 to 2.0 kg
			5. Xanthium Strumarium	
			6. Brachiaria Sp	
			7. Digitaria Sp	
			8. Cleome Viscosa	
			9. Polygonum Sp	

			10. Dactyloctenium Aegyptium		
			11. Eragrostis Sp		
			12. Digitaria Sanguinalis		
			13. Borreria Hispida		
			14. Ageratum Conyzoides Commelina Benghalensis		
17.	Triallate	Wheat	Avena Fatua	1.25 kg	
				EE	Amine Salts
18.	2,4-D	1. Sorghum	1. Echinochloa Spp	1.0 kg	1.8 kg
		2. Maize	2. Echinochloa Crusgalli	0.9 kg	0.5 kg
		3. Wheat	3. Panicum Spp	0.45 to 0.75 kg	0.5-0.75kg
		4. Sugarcane	4. Cyperus Spp.	1.2 to 1.8 kg	3.5kg
		5. Paddy	5. Ludwigia Parviflora	0.85 kg	-
		6. Potata	6. Eclipta Alba		2.0 kg
		7. Tea	7. Ammania Bacifera		0.8kg
		8. Citrus Groups	8. Striga Sp.		
		9. Aquatic Weeds	9. Trianthema Sp	2.5kg	0.5-1.0kg
		10. Non Crop Area	10. Digera Arvensis		
			11. Convolvulus Arvensis		
			12. Euphoria Hirta	NA	Salt
			13. Phyllanthus Niruri	1.0 kg Maize	
			14. Amaranthus Sp.	0.5 to 0.8 kg Wheat	
			15. Portulaca Oleracea	2 to 2.6 kg Sugarcane	
			16. Chenopodium Album	1.5 kg aquatic Weed	
			17. Asphodelus Tenuifolius	0.5 to 1.0 kg Tea	
			18. Fumaria Parviflora	4 to 8 kg Non-Crop Land	
			19. Melilotus Alba	1.0 to 2.5 kg Citrus	
		20. Spergula Arvensis	2.0 kg		
		21. Commelina Benghalensis	Grapes		
		22. Eichhornia			

			Crassipes		
			23. Trianthema Monogyna		
			24. Ageratum Sp		
			25. Parthenium Hysterophorus		
19.	Oxyfluorfen	1. Paddy	1. Echinochloa Spp	150-240 gm	
			2. Cyperus Iria		
			3. Cyperus Difformis		
			4. Eleusine Indica		
			5. Eclipta Alba		
			6. Fimbristylis Spp		
		2. Tea	1. Digitaria Spp		
			2. Imparata Cylindrical		
			3. Paspalum Conjugatum		
		3. Potato	1. Chenopodium Album	150-250 gm	
			2. Coronopus Didymus		
			3. Haliotropium Eichwaldi		
			4. Ttrianthema Monogyna		
			5. Cyperus Iria		
		4. Onion	1. Chenopodium Album	150-250 gm	
2. Amaranthus Viridis					
5. Groundnut	1. Echinochloa Colonom	150-250 gm			
	2. Digitaria Spp				
20.	Srimate	1. Wheat	1. Phalaris Minor	5.0 kg	
		2. Potato	2. Poa Annua	5.0 kg	
		3. Peanut	3. Echinochioa Colonom	7.5 kg	
			4. Digitaria Spp		
			5. Chenopodium		
			6. Anagalis arvensis		
21.	Trichloro Acetic Acid	Non Cropped Area	1. Agropyron Repens	6.0 - 7.5 kg	
			2. Cynodon Dactylon		
			3. Sorghum Helepense		
22.	Anilophos	1. Paddy	1. Echinochloa Spp.		
			2. Cyperus Iria		
			3. Cyperus Difformis		
			4. Eleusine Indica		
			5. Fimbristylis Miliacea		

			6. Ludwigia Parviflora	
			7. Ischaemum Rugosum	
		2. Soyabean	1. Echinochloa Colonom	1.25 to 1.50 kg
			2. Commelina Benghalensis	
			3. Cyanotis Axilaris	
			4. Ageratum Conyzoides	
			5. Acalypha Indica	
			6. Xanthium Strumarium	
			7. Acalypha Indica	
23.	Metribuzin	1. Sugarcane	1. Cyperus Spp.	1.05 - 2.0 kg
		2. Potato	2. Cynodon Dactylon	0.525 kg
		3. Tomato	3. Chenopodium Album	0.525 kg
		4. Soybean	4. Convolvulus Arvensis	0.350 - 0.525 kg
			5. Portulaca Oleracea	
			6. Echinochloa Spp.	
			7. Commelina Spp.	
			8. Trianthema Monogyna	
			9. Fumaria Parviflora	
			10. Melilotus Spp.	
			11. Phalaris Minor	
			12. Digitaria Spp.	
24.	Trifluralin	1. Cotton	1. Trianthema Spp.	0.96 to 1.2 kg
			2. Acalypha indica	
			3. Euphorbia spp.	
			4. Commelina sp.	
			5. Eleusine sp.	
			6. Eragrostis tinella	
			7. Phyllanthus niruri	
			8. Amaranthus sp.	
			9. Echinochloa sp.	
			10. Cyperus difformis	
			11. Cyperus iria	
2.	Soybean	1. Euphorbia Sp.	0.96 to 1.2 kg	
		2. Acalypha Indica		
		3. Cyperus Difformis		
		4. Cyperus Iria		
		5. Phyllanthus Niruri		
25.	Metolachlor	Soybean	1. Echinochloa Spp	1.0 Kg
			2. Eleusine Indica	
			3. Digitaria Sp	
			4. Dactyloctenium	

			Aegyptium	
			5. Panicum Spp	
			6. Cyperus Spp	
			7. Amaranthus Viridis	
26.	Oxadiazon	Transplanted Paddy	1. Echinochloa Crusgalli 2. Echinochloa Colonom 3. Cyperus Iria 4. Cyperus Difformis 5. Marsilia Quadrifoliata 6. Eclipta Alba 7. Ludwigia Spp	0.50 kg
27.	Pretilachlor	Transplanted Paddy	1. Echinochloa Crusgalli 2. Echinochloa Colonom 3. Cyperus Difformis 4. Cperus Iria 5. Fimbristylis Miliacea 6. Eclipta Alba 7. Ludwigia Parviflora 8. Leptochloa Chinensis 9. Monochrea Vaginalis 10. Penicum Repens	0.5 to 0.75 kg
28.	Diclofop Methyl	1. Wheat 2. Sugar Beet	1. Avena Fatua 2. Phalaris Spp 3. Loolium Spp 4. Digitaria Spp 5. Agrostis Spp 6. Setaria Spp 7. Panicum Spp	Registered for Export Only.

Plant Growth Regulators

Sr. No.	Plant Growth Regulators	Crops	Weed Species	Dose a.i. / ha
I	II	III	IV	V
1.	Gibberallic Acid	1. Grape Fruit	At all bloom (for Fruit Seed)	500-1000 gm
		2. Sweet Cherry		40-80 gm
		3. Grapes	For Fruit set	100 ppm
		4. Grapes (Seedless)		15-60 ppm
		5. Brinjal	Blanket spray weekly	50 ppm
			Seed treatment dibbing	10 ppm

2.	Alpha Naphthyl Acetic Acid (A.N. A.)	1. Tomato	At the time of Flowering	45 /20.25 ppm
		2. Brinjal	At the time of flowering	45 / 20.25 ppm
		3. Pea	At the flowering stage	10 / 45 ppm
		4. Chillies	During flowering stage	10 /45 ppm
		5. Apple	6-14 day before heavy drop is expected	10 / 0.12 - 0.2 ppm
			When fruits are of pea size	10 / 0.12 - 0.2 ppm
		6. Citrus	When fruits are of pea size and to control malformation. Spray before 3 months of flowering	20 / 0.24 - 0.4 ppm
		7. Mango	3 sprays.	10.20 ppm
55, 70 and 85 days after sowing to check the falling of flower & balls.				
	8. Cotton			
3.	Ethenphon	1. Mango	Breaking alternate bearing tendencies	200 ppm.
			For flower induction	1000 ppm
			For post harvest treatment	500 ppm.
		2. Pineapple	For Flower induction	100 ppm.
		3. Coffee (Arabica)	For uniform ripening of berries	192 ppm.
		4. Coffee (Robusta)	For uniform ripening of berries	96 ppm.
		5. Tomato	Post harvest treatment	2500 ppm.
		6. Cucumber	For sex modification	125 ppm.
7. Groundnut	For breaking seed dormancy	500 ppm.		
8. Rubber	For boosting latex yield	1000 ppm.		
4.	Chloro Choline Chloride (CCC) or Chlormequat Chloride	1. Cotton	Square formation to early flowering	20-40 gm
		2. (American) Cotton (Desi)	Square formation to early flowering	75 gm
		3. Grape	Pre bloom stage	600 - 1000 ppm.
		4. Brinjal	Before sowing (Seed	50 ppm.

			Soaking for 24 hours)	
		5. Ber	Mid July	100 ppm.
		6. Potato	Dipping of cut pieces for 10 minutes	100 ppm.
5.	Maleic Hydrazide	1. Onion	Preventing of Bolting	750 ppm.
			Pre-harvest spray	
		2. Grapes	Induction of pollen sterility; at an early stage of development of panicle	500 - 750 ppm.
		3. Tomato	Induction of pollen sterility;	50 - 100 ppm.
		4. Onion	a week prior to opening of first flower	50 - 100 ppm.
		5. Tobacco	Suppression of suckers; spraying after detopping	2,500 - 3,000 ppm.
		6. Cow Pea	To check apical dominance; before flower initiation	50 - 200 ppm.
		7. Poppy - Opium	Latex stimulant; one week before lancing	30 - 45 ppm.
		8. Brinjal	To induce pollen sterility; before opening of flower	600 ppm.
		9. Potato	15-20 days before harvest	3000 ppm

Fungicides

Sr. No.	Fungicides	Crops	Weed Species	Dose a.i. / ha
I	II	III	IV	V
1.	Benomyl	1. Apple	Scab	1.25 gm / 10 l.w/tree
		2. Cucurbits	Anthraco nose	100 gm / 600 l.w
			Powdery mildew	
		3. Grapes	Anthraco nose	150 gm in 625-700 l. w.
			Powdery mildew	
		4. Groundnut	Tikka leaf spot	112.5 gm in 750 l.w.
5. Peas	Powdery mildew	125 gm in 600 l.w.		
6. Chilly		100 gm in 600 l.w.		

		7. Wheat	Loose smut	1 gm/Kg seed restricted in use
2.	Captafol	1. Pea	Seed rot	3.2gm / kg seed
		2. Groundnut	Seed and seedling Rot	
		3. Sorghum	Seedling Blight	2.47gm / kg seed
		4. Maize		
		5. Chillies		
		6. Tomato	Damping Off	
		7. Soyabean	Seed rot and Seed born disease	3.2 gm / kg seed
3.	Captan	1. Apple	Scab	1.25 kg/ha
		2. Cabbage	Damping off	1-1.5 gm/l
		3. Cauliflower		
		4. Cherry	Brown rot	1.25 kg / 750-1000 l.w.
		5. Chilly	Damping off	1 - 1.5 gm/l
		6. Coffee	Leaf spot	
		7. Grapes	Downy mildew	1.25 kg / 750-1000 l.w.
		8. Potato	Early blight	
			Late blight	
		9. Tobacco	Damping off	1 - 1.5 gm/l
		10. Tomato	Damping off	
			Early blight	1.25 kg / 750-1000 l.w.
			Late blight	
4.	Carbendazim	1. Apple	Scab	1.25 gm/10 l tree
		2. Barley	Loose smut	1 gm / Kg seed
		3. Ber	Powdery mildew	5 gm / 10 l water / tree
		4. Brinjal	Fruit rot	150 gm in 600 l. water
			Leaf spot	
		5. Chilly	Damping off	1 gm / kg seed
		6. Cluster bean	Powdery mildew	125 in 750 l. water
		7. Cotton	Leaf spot	
		8. Cow Pea	Anthraco	150 gm in 600 lo. Water
Collar rot				
Leaf spot				
Powdery mildew				
5.	Copper Oxy	1. Arecanut	Koleroga	1.25 kg / 750 -

Chloride	2. Banan	Fruit rot, leaf spot	1,000 l.w
	3. Betelvine	--do--	
	4. Cardamom	Clump rot	1.87 - 2.75 kg / 750 - 1,000 l.w.
		Leaf spot	1.25 kg / 750 -
	5. Chilly	Fruit Rot, Leaf Spot	1,000 l.w.
	6. Citrus	Canker, foot rot	
	7. Coconut	Bud rot	
	8. Coffee	Black rot, rust	1.87 - 3.75 kg / 750 - 1,000 l.w.
	9. Cumin	Leaf blight	1.25 kg / 750-
	10. Grapes	Downy mildew	1000 l.w.
	11. Paddy	Brown leaf spot	
	12. Palmyra	Bud rot	
	13. Pepper	Fruit Rot, Leaf Spot	
	14. Potato	Early blight, late blight	
	15. Rubber	Secondary leaf fall	1.8 - 6.25 kg metallic cu/ha
	16. Tea	Black rot, red rust	600 gm / 125 l.w.
		Blister blight	420 gm / 175 l.w.
	17. Tobacco	Black shank, frog eye spot	1.25 kg / 750-1000 l.w.
18. Tomato	Early blight, late blight	1.25 kg / 750-1000 l.w.	
	Leaf spot		
6. Carboxin	Barley	Covered smut, loose smut	1 - 1.25 gm / kg seed
	Cotton	Angular Leaf Spot	
		Bunt, Flagr Smut	
	Wheat	Loose smut	
7. Copper Sulphate			It is used in the form of Bordeaux mixture which is spre on Coffee, Cardamom, Rubber, Tea, Citrus, Guava, Coconut, Papaya

				and Potato to Control Fungus Diseases.
8.	Cuprous Oxide	Paddy	Blast	0.2 kg / Acre
		Potato	Late blight	
		Rubber	Secondary leaf fall	
		Arecanut	Koleroga	
		Betelvine	Wilt & foot rot	
		Chillies	Fruit rot	
		Citrus	Canker fruit fall	
		Coffee	Leaf rust, black rot	
		Cotton	Anthraco nose	
			Bacterial blight	
			Black arm	
		Grapes	Downy mildew, anthracnose	
		Groundnut	Tikka leaf spot	
9.	Dinocap	Apple, Grapes	Powdery mildew	100 ml in 750 l. water
		Mango, Beanes		
		Okra, Peaches		
		Ber, Peas, Poppy		
		Chilly, Rose,		
		Wheat, Cucur - bits, Cumin,		
		Fenugreek		
10.	Dithianon	Apple	Scap	1350 gm/ha.
11.	Edifenphos	Paddy	Blast, Brown leaf spot	250 - 300 ml / 750-1000 l. water
12.	Ferbam	Apple	Scab	1.125 - 1.5 kg / 750 - 1000 l.w
		Carnation	Rust	1.5 gm / 1 l.w.
		Sweet potato	Black spot	1:2000 mixture
		Rose	Black spot	1.5 gm / 1 l.w.
13.	Kitazin	Paddy	Blast, Brown leaf spot	0.5 kg / has
14.	Mancozeb	Apple	Black rot, Fly Speck	22.5 gm/10

	Scab, Scooty blotch	l.w./tree
Banana	Cigar end rot, Leaf spot Sigatoka, Tip rot	1.125 - 1.5 kg in 1,000 l. water
Bean	Anthraco nose, Leaf Spot	1.125 - 1.5kg in 750 l. water
Cardamom	Capsule rot, Leaf rot	1.125 kg in 1,000 l.w.
Cauliflower	Collor rot Leaf Spot	2.25 gm / l.water 1.125 - 1.5 kg in 750 l. water
Chilly	Damping off Fruit rot, leaf spot, ripe rot	2.25 gm / 1.1.w. 1.125 - 1.5 kg in 750 l. water
Coconut	Leaf rot	22.5 gm / 10 l.w./tree
Cucurbits	Anthraco nose, downy mildew	1.125 - 1.5kg in 750 l. water
Ginger	Yellow disease	450 gm / 300 l. water for 12 - 14 quintals
Grapes	Angular leaf spot Anthraco nose, Downy mildew	1.125 - 1.5 kg in 750 l.w.
Groundnut	Rust, Tikka leaf spot	--do--
Guava	Fruit rot	15 gm/10 l.w./tree
Maize	Downy mildew, leaf blight	1.125 - 1.5 kg in 750 l. water
Onion	Leaf blight	
Paddy	Blast	
Potato	Early blight, late blight	
Sorghum	Leaf spot	
Soybean	Rust	
Sugarbeet	Leaf spot	
Sunflower	Leaf rust, Leaf spot	
Tapioca	Leaf spot	
Tomato	Buck eye rot, Late Blight, leaf spot	
Urid	Leaf spot	

		Wheat	Black rust, Brown rust, Leaf blight	
		Walnut	Downy leaf spot	15-20 gm / 10 l.water/tree
15.	MEMC (3%--6%)	Cotton	Seed borne diseases	0.25% Hg/Kg seed
		Dahlia	Bulb diseases	
		Ginger	Rhizom rot	
		Gladiolus	Bulb diseases	
		Paddy	Seed borne diseases	
		Potato	Tuber treatment	
		Sugarcane	Whip smut	
16.	Metalaxyl	Sorghum	Downy mildew	700 gm/100 kg seed
		Bajra	--do--	670 gm/100 kg seed
17.	Nickel Chloride (23-25% Elemental-Nickel)	Tea	Blister blight	225 - 300 g / 50 l.w.
18.	Streptomycin & Oxytetracycline (9:1)	Chilly	Black spot	1.5 gm in 10 l. water
		Cotton	Angular leaf spot, Black arm	0.5 - 1.5 gm in 10 l. water
		Paddy	Bacterial streak	
19.	Sulphur	Apple	Powdery mildew	2.0-4.0 kg / 750-1000 l, water
		Chillies, Okra, Mango, Citrus,		2.5 kg/750-1000 l. water
		Beans		
		Grapes, Cumin		12.0-16.0 kg/ha
		Coriander		
		Tobacco		80 kg/ha
		Rubber		30kg/ha
		Groundnut		Tikka leaf spot
		20.	Tridemorph	Ber, Mango
		Tea	120-150 ml/ha	
		Cucurbits,	240-300 ml in 750 l. Water	
		Cluster bean,		
		Peas, Betelvine		
		Wheat		

21.	Thiram	Barley	Covered smut, Stripe disease	2 - 2.25 gm / kg seed
		Cotton	Seed borne disease	
		Ginger	Rhizomic rot	
		Gladiolus	dry rot	
		Maize	Seedling blight	
		Paddy	Seed borne disease	
		Rubber	Panel rot, Pink disease	
		Sorghum	Grain smut, loose smut	
		Sugarcane	Whip smut	
		Wheat	Bunt, Flag smut, Karnal bunt	
22.	Thiophanatemethyl	Apple	Scab	500 gm/ha
		Wheat	Brown rust	
		Cucurbits	Powdery mildew	1,000 gm/ha
23.	Zineb	Apple	Black rot, fly speck, scab	1.1 - 1.5 kg / 750 - 1,000 l.w.
		Bean	Downy mildew	
		Brinjal	Leaf blight	1.1 - 1.5 kg / 750 - 1,000 l.w.
		Cherry	Leaf spot	
		Citrus	Greasy spot	
		Cumin	Early blight	
		Cucurbits	Anthrancnose, Downy mildew, Leaf spot	
		Grapes	Downy mildew	
24.	Ziram	Apple	Scab	1.2 - 1.6 kg / 750 - 1,000 l.w
		Bean	Anthrancnose	
		Grapes	Anthrancnose, Downy mildew	
		Potato	Early blight	
		Tomato	Early blight	
25.	Bitertanol	Groundnut	Tikka, rust	250 gm/ha
		Apple	Scab	0.02%
		Tea	Blister blight	50 gm/ha
		Wheat	Karnal bunt	560 gm/ha
26.	Chlorothalonil	Groundnut	Tikka leaf spot, rust	0.66 - 0.863 kg/ha
		Potato	Early & Late	0.66 - 0.937 kg/ha

			blight	
		Apple	Scab	0.15%
27.	Dodine	Apple	Scab	0.05%
28.	Fosetyl-AI	Grapes	Downy mildew	1120 - 1600 gm/ha
		Cardamom	Azukhal & damping off	1800 - 2400 gm/ha
29.	Triadimefon	Wheat	Rust	250 gm/ha
		Pea	Rust, Powdery mildew	0.025 gm/ha
		Grapes	Powdery mildew	0.0025 gm/ha
		Coffee	Coffee rust	0.02 gm/ha
30.	Metalaxyl & Mancozeb	Grapes	Downy mildew	0.40%
		Tobacco	Damping off	0.07%
		Nursery	Leaf blight, black shank	0.14%
31.	Fenarimol	Apple	Scab	5 gms / 100 litres of water
		Chillies	Powdery mildew	
		Pea	Powdery mildew	
32.	Tricyclazole	Paddy	Blast	225 - 300 gms / 100 ltrs of water
33.	Myclobutanil	Apple	Scab	0.004%
		Grape	Powdery mildew	
34.	Validamycin	Rice	Sheath blight	0.0018%
35.	Aureofungin	Paddy	Blast, Brown leaf spot	0.0025%
		Grapes	Downy mildew, Anthracnose	
		Cumin	Blight, Powdery mildew	0.001 %
		Citrus	Guminosis	0.5 %
		Apple	Powdery mildew, White root rot	0.002 % - 0.1 %
		Potato	Early blight	0.0025 %
36.	Penconazole	Grape	Powdery mildew	5 gm / 100 l.w
		Apple	Scab	
		Mango	Powdery mildew	
		Pulses	Powdery mildew	
37.	Propiconazole	Wheat	Karnal bunt, leaf rust	125 gm
			Brown rust	
			Stem rust	
			Stripe rust	

		Rice	Sheath blight	
		Groundnut	Early leaf spot	
			Late leaf spot	
		Tea	Blister blight	31.25-62.50 gm
38.	Hexaconazole	Apple	Scab	25 gm
		Rice	Blast	
		Grapes	Powdery mildew	
		Groundnut	Tikka leaf spot	
		Pea	Powdery mildew	
		Mango	Powdery mildew	
39.	Iprodione	Mustard	Alternaria blight	1,000 gm
		Rice	Sheath blight	500 - 1,000 gm
		Tomato	Early blight	250 - 1,000 gm
40.	Oxycarboxin	Coffee	Leaf Rust	200 - 400 gm

Insecticides

Sr. No.	Herbicides	Crops	Weed Species	Dose a.i. / ha
I	II	III	IV	V
1.	Acephate	Cotton	Bollworms	584 gms
			Jassid	292 gms
			Whitefly	
		Safflower	Aphid	584 gm
2.	Aldicarb	Potato	Golden Nematode	2,000 gm
		Tobacco	Root-Knot Nematode	1,000 - 4,000 gm
3.	Alphacypermithrin	Cotton	Bollworms	15 - 20 gm
4.	Allethrin (used in mosquito coil & mat)	Household	Mosquito	40 mg in 1 gm of mat
5.	Aluminium Phosphide	Stored Whole Cereals and seed grains	Rice Weevil, Rust red flour beetle	3 gm tablet for 1 tonne of commodity or 150 gm / 200 m cube
		Milletts, Pulses	Lesser grain borer, Khapra Bettle, saw toothed gain	225 gm / 100 m cube
		Dry Fruits, nuts, spices and oil seeds	beetle, Almond moth, Rice moth	

		Milked products cakes, rice-bran	Rust red flour beetle saw toothed grain beetle rice moth	3 tables / tonnes
		Flour Suji meals and crushed grain (Animal and Poultry feed)	Almond moth, Long headed flour beetles	225 gm / 100 m cube
		split pulses (Dal) and other processed foods emptygodown and sheds	mites	14 tables / 1,000 cube or 150 gm / 1,000 cube of 0.6 gm per burrow
			All insects and pest	
			Indian gerbil	
			Lesser Bandicoot	
			House rat	
			Little field mouse House Mouse	
6.	Barium Carbonate	Godowns Residential premises public halls	Rats. Mice & Field rodents	10 - 20 % technical material to be mixed with bait
7.	BHC*	Paddy	Gundhi bug	1,250 - 2,000 gm * total ban w.e.f. 1.4.97
			Stem borer	
			Swarming caterpillar	
			Brown plant hopper	
			Hispa	
			Thrips	
			Grass hopper	
		Cotton	Red cotton bug	1,250 - 2,000 mg
			Thrips	
			Aphid	
			Leaf roller	
			Jassid	

		Sugarcane	Pyrilla	4,000 gm
			Whitefly	
			Top shoot borer	
			Termite	
		Wheat	Stem borer	1,000 gm
		Maize	Leaf eating	2,000 gm
			Caterpillar	1,800 - 2,000 gm
			Earhead bug	
		Black gram	Leaf eating Caterpillar	
		Gram	Cut worm	2,000 - 3,000 gm
		Sorghum	Stem borer	32.5 gm
			Hairy Caterpillar	
		Red gram	Pod Borer	
		Soybean	Aphid	
Cardamom	Thrips			
8.	Bromodiolone	Field Crops & residential premises	All types of rats	0.005%
9.	Carbaryl	Maize	stem borer, cob borer	700 - 1,200 gm
		Paddy	Shoot fly	750 gm
			Brown Plant hopper	1,000 gm
			Case worm, Green Leaf	750 gm
			hopper, stem borer,	750 - 1,000 gm
			Leaf roller, earhead cutting caterpillar	1,250 gm
		Sorghum	Army worm, Aphid, Earhead midge	1,000 gm
			Hopper, stem borer, Shoot fly	750 - 1,000 gm
		Pulses	Podborer, Leafminer, Leaf-folder	750 - 1,500 gm
		Sugarcane	Leafroller	750 gm
		Cotton	Aphid	1,000 gm
			Bollworm, Whitefly	

			Jassid		
			Leaf roller		
			Stemweevil		
			Thrips		
		Jute	Semilooper	1,500 gm	
		Oilseeds	Semilooper	1,000 gm	
			Leafminer	500 gm	
			Red hairy caterpillar	1,250 gm	
			Capsule borer	1,000 gm	
			Tobacco caterpillar	750 gm	
		Vegetables	Fruit borer	1,000 gm	
			Jassid		
			Semilooper		
			Cabbage borer	800 gm	
			Thrips	1,000 gm	
			Mustard sawfly		
			Red pumpkin beetle		
		Fruit trees (Apples, ber, Citrus, grapevine, guava, mango)	Green scale	0.2%	
			Butterfly		
			Woolly aphid	0.05%	
			Mealy bug	0.025%	
			Bark eating caterpillar	0.1%	
			Mango hoppers		
			Ber Fruit borer		
		Tobacco	Capsule borer	1,200 gm	
			Tobacco caterpillar	600 gm	
		Coffee	Green bug	0.02 %	
			Hairy Caterpillar	0.05%	
		Singhara	Singhara beetle	1,000 gm	
		10. Carbofuran	Bajra	Shoot fly	1,500 gm
			Barley	Aphid	100 gm
				Jassid	1,250 gm
Cyst nematode	1,000 gm				
Maize	Stemborer		1,000 gm		
	Shoot fly				
	Thrips, cutworm	500 - 1,000 gm			

		Paddy	Brown plant hopper	750 gm	
			Gall midge		
			Green leaf hopper		
			Hispa	1,500 gm	
			Leaf roller	750 gm	
			Stem borer		
			Nematodes	2,000 gm	
		Sorghum	Shoot fly	1,000 gm	
		Wheat	Ear cockle nematode	3,000 gm	
			Cereal cyst nematode	2,000 gm	
		Cotton	Jassid	750 gm	
			Stemweevil	1,000 gm	
			Grey weevil		
		Jute	Nematodes	1,000 gm	
		Oilseeds (Groundnut, Mustard)	Pod borer	1,500 gm	
			White grub	1,000 gm	
			Mustard leaf miner		
			Flea beetle		
		Pulses (Pea, Soybean)	Pea shoot fly	1,000 gm	
			Pea aphid		
			Agromyzid fly	1,000 gm	
			Whitefly	1,500 gm	
			Rootknot nematode	2,000 gm	
		Sugarcane	Top borer	1,000 gm	
		Vegetables (Brinjal, Bhindi, Chillies, cabbage, potato, tomato, sweet pepper)	Rootknot nematode	2,000 gm	
			Reniform nematode		
			Jassid		
			Aphid		
			Thrips	100 gm	
			White grub		
			Golden Nematode		2,625 gm
			Potato tuber moth		1,000 gm
		Whitefly	1,200 gm		
Fruit crops (Apple, banana, citrus, peach)	Woolly aphid	5 gm / tree			
	Rhizome weevil	1 gm / sucker			
	Nematodes	1.5 gm / sucker			
	citrus leaf miner	1,500 gm			

			Soft green scale	0.4 gm / tree
		Tea	Cockchafer grubs	0.3 gm / tree
		Tobacco	Green peach aphid	1,500 gm
			Rootknot nematode	1,000 to 4,000 gm
			Stem borer	1,500 gm
11.	Cartap hydrochloride	Rice	Stemborer	500 gm
			leaf folder	750 - 1,000 gm
			Whorl maggot	
12.	Chlorfenvinfos	Rice	Plant and leaf hoppers	10 - 30 kg/ha pf 10% Gr.
			stem borer	
			Gall midge	
			Root weevil	
		Sugarcane	Borers	
		Sorghum	Shoot fly	
		Banana	Root weevil	
		Turmeric and Ginger	Rhizome fly	
		All crops	cut worms	
			White grub	
			Millipede	
	Public health	Mosquito larvicide		
13.	Chlorbenzilate	Vegetables	Mites	340 - 500 mg in 360-150 liters of water
		Fruit trees, Ornamental plants		
14.	Chlorpyriphos	Barley	Cereal aphid	375 gm
		Paddy	Brown plant hopper	0.02%
			Green Leaf hopper	0.02 %
			Hispa	250 gm
			stem borer	0.02%
			whorl maggot	
			gall midge	
		leaf roller	375 gms	
		Pulses (beans, gram, mung, Urd)	Pod borer	400 - 600 gm
			aphid	600 gm
			cutworm	500 gm
bihar hairy caterpillar	300 - 500 gm			
Sugarcane	Early shoot borer	205 - 300 gms		

			Pyrilla	300 gm
			Bollworm	250 gm
			aphid	
			whitefly	
			Jassid	
			Grey weevil	
		Oilseeds (Groundnut, Mustard)	aphid	100 - 200 gm
		Vegetables (Brinjal, Cabbage, Cauliflower, muskmelon, Onion, Potato)	Shoot and fruit borer	200 gm
			Diamond back moth	400 gm
			Beetles	100 gm
			Root grubs	1,000 gms
		Fruit trees (Apple, Ber, Citrus, Grape)	Aphid	0.05 %
			Leaf hoppers	0.03 %
			Root grubs	2 gm / plant
Coconut	whitegrub	1 gm / treepit		
Tea	Semilooper	150 gm		
Tobacco	Leaf eating caterpillar	300 gm		
General	Locust	200 gm		
15. Coumachlor	Farm-houses	rats	1:19	
	Godowns	Mice	1 part of coumachlor +19 parts Wheat grains	
	ware-house shops	Bandicoots		
16. CoumotertralyI		Rodents	0.0375 % in bait	
17. Cypermethrin	Cotton	Bollworm	40 - 70 gm	
		Jassid	20 - 30 gm	
		Thrips	20 - 30 gm	
	Sugarcane	Early shoot borer	60 - 70 gm	
	Vegetables (Bhindi & Brinjal)	Shoot & Fruit borer	37 - 50 gm	
		Jassid		
		Epilchna grub		
		Diamond back moth	60 - 70 gm	
Wheat	shoot fly	50 gm		
Sunflower	Bihar hairy caterpillar	60 - 70 gm		
18. Cyfluthrin	Public health	Adult mosquito	25 mg per sq. m	
19. Deltamethrin	Cotton	Bollworm	12.5 gm	

			Sucking insects	10 gm
20.	DDT	Public health	Mosquito, flies, etc.	restricted in use
21.	Diazinon	Pulses	Aphid	180 gm
			Leaf hopper	180 gm
			Whitefly	180 gm
		Vegetables (Cauliflower)	Diamond back moth	750 gm
		Mango	Mud mite	0.1 %
			Hoppers	0.03 %
		Tea	Aphid	90 gm
			Scale insect	90 gm
22.	Dichlorvos	Paddy	Brown plant hopper	375 gm
			cut worm	500 gm
			leaf roller caterpillar	500 gm
		Wheat	Caterpillar	500 gm
		Soybean	Leaf earting caterpillar	225 - 300 gm
		Sugarcane	Pyrrilla	300 gm
		Oilseeds (castor, Groundnut, Mustard, Sunflower)	Hairy caterpillar	625 gm
			Painted bug	500 gm
			semilooper	
		Cucurbits	Cabbage looper	500 gm
			Red pumpkin beetle	
		Cashew	Apple borer	0.05 %
Apple	Gypsy moth	0.05 %		
23.	D.D. Mixture	Used against nematodes	(withdrawn from the market by the principal manufacturer)	
24.	Dicofol	Cotton	Mite	500 - 1,000 gm
		Sorghum	Mite	625 gm
		Jute	Red and white mite	1,110 gm
		Sugar beet		90 - 95 gm
		Citrus		0.037%
		Okra		500 gm
		Chillies		
		Tea	Mite, Jassid, Thrips	500 gm
		Tapioca		500 gm
		Groundnut		500 gm
25.	Diflubenzuron	Cotton	Tobacco	75 - 87.5 gm

			Caterpillar		
			Bollworm	75 gm	
			Leaf webber	75 - 100 gm	
26.	Dimethoate	Bajra	Milky weed bug	180 - 200 gm	
		Maize	Stem borer	200 gm	
			Shoot fly	350 gm	
		Paddy	Dalphacid aphid	200 gm	
		Sorghum	Midge	500 gm	
		Pulses	Pod borer	375 gm	
			Thrips	200 gm	
		Cotton	Aphid	200 gm	
			Jassid		
			Thrips		
			Grey weevil	300 gm	
		Oilseeds (Castor, groundnut, mustard, ragi, rape, sunflower)	Aphid	200 gm	
			Jassid	250 gm	
			Whitefly		
			Saw fly	200 gm	
			Semilooper	350 gm	
		Vegetables	Aphid	700 gm	
			Leaf hopper	600 gm	
			Jassid		
Shoot borer	200 gm				
Painted bug					
		200 gm			
(Brinjal, Bhindi, Cabbage, Cauliflower, Chillies, Onion, Potato, Snakegourd, Spongegourd, Tomato)	Thrips	300 gm			
	Whitefly				
	Cenerbit fruit fly				
Fruit trees (Apple, Apricot,	Stem borer	0.03%			
	Woolly aphid				
	Aphids				

		Arecanut, Banana, Ber, Betelvine, Citrus, Fig, Litchi, Mango, Peach, Plum, Pomegranate)	Scale	700 gm	
			Psylla	0.05%	
			Leaf hoppers	0.03%	
			Coccid	0.05%	
		Coffee	Green bug	250 - 500 gm	
		Lucerne	Leaf hopper	200 gm	
		Pepper	Pollo beetle	750 gm	
		Rose	Scale, thrips	400 - 750 gm	
		Tapioca	Scale, thrips	300 gm	
		Tea	Mite	200 gm	
		Tobacco	Green peach aphid		
		Turmaric	Lace wing bug	375 gm	
27.	E.D.C.T. (Ethylene Dichloride Tetrachloride-3:1)	Grain storages & godowns	All stored grain pests	300 - 400 gm/cu.m.	
28.	Endosulfan	Rice (Paddy)	Stem borer	210 gm	
			Gall midge		
			Case worm	525 gm	
			Jassid	175 gm	
			Swarming caterpillar	525 gm	
			Leaf roller	615 gm	
			Hispa	525 gm	
			Brown plant hopper	525 gm	
			Green leaf hopper		
		Wheat	Aphid	175 gm	
			Termite		
			Army worm		
		Jowar	Midge	472 gm	
			Army worm	625 gm	
			Cut worm		
			Stem borer	472 gm	
			Red hairy caterpillar		
			Aphid		
		Pulses	Gram caterpillar	390 - 485 gm	
			Cut worm		
			Red hairy		

	caterpillar	
	Semilooper	
	Pod borer	
Sugarcane	Termite	350 gm
	Thrips & whitefly	140 - 175 gm
	Pyrilla	175 gm
	Early shoot border	350 gm
	Black bugs	472 - 630 gm
Cotton	Aphid	525 - 700 gm
	Jassid	
	Whitefly	
	Thrips	
	Grey weevil	700 - 875 gm
	Dusky cotton bug	
	Bollworm	875 - 1,050 gm
	Leaf folder	
Jute	Semilooper	437 gm
	Bihar hairy caterpillar	
Maize	Stem borer	472 gm
	Army worm	
Vegetables (Chilly, Brinjal, Bhindi, Tomato, Cabbage)	Thrips	312-625 gm
	Tobacco Caterpillar	525 - 656 gm
	Heliiothis	
	Shoot and fruit borer	420 - 525 gm
Tobacco	Green Caterpillar	525 - 656 gm
	Black hairy Caterpillar	
	Grass hopper	
	Ground beetles	
	Tobacco Caterpillar	
Cardamom	Thrips	4.37 gm
	Hairy Caterpillar	656 gm
Tea	Aphid	281 - 350 gm
	Caterpillars	
	Heliiothis	
	Mealy bug	
	Scale insects	
	Thrips	
Coffee	Green bug	650 gm
	Thrips	437 gm
Cashew	Tea mosquito	0.05%
	Thrips	
Mango	Hoppers	

			Gall maker and fruit fly	0.20%
		Cocoa	Heliothis	0.05%
		Groundnut	Aphid	350 - 437 gm
			Thrips	
				Hairy Caterpillar
		Grapevine	Thrips	350 gm
				Flea beetle
		Citrus	Lemon Butterfly	0.07%
		Mustard	Aphid	175 gm
				Gall midge
		Safflower	Aphid	390-485 gm
		Til	Sphinx moth	585 - 680 gm
				Leaf & pod caterpillar
29.	Ethion	Tea	Thrips	250 gm
			Mites	
			Aphid	
			Caterpillar	
30.	Ethylene Dibromide	Green Storages, Milled products spices & dry fruits in stores	Stored grain pests	16 - 24 gm/cu.m
31.	Ethofenprox	Rice	Stem borer	50 - 75 gm
			Leaf rollers, GLF,	
			Gall midge, BPH	
			Whorl maggot, WBPH	
32.	Fenitrothion	Paddy	Blue leaf hopper	500 gm
			Gall midge	750 gm
			Whorl maggot	500 gm
			Leaf folder	
			Plant hopper	
			Stem borer	500 - 750 gm
			Earhead bug	
		Cotton	Aphid	400 gm
			Bollworms	750 gm
			Grey weevil	400 gm
			Jassids	500 gm
Whitefly				
	Leaf roller	750 gm		

		Oilseeds (Groundnut, Castor Mustard, Toria)	Red hairy caterpillar	750 gm
			Semilooper	550 gm
			Leaf eating caterpillar	
			Capsule borer	
			Leaf miner	
			Leaf webber	500 gm
		Vegetables (Brinjal, Chillies, Potato, Tomato, Onion, Cucurbits)	Thrips	500 gm
			Fruit borer	
			Jassids	
		Sugarcane, Coffee	Pyrilla	500 gm
			Green bug	1,500 gm
			Hairy caterpillar	
			Mealy bug	1,250 gm
33. Fenthion		Paddy	Brown plant hopper	500 gm
			Blue leaf hopper	
			Gall midge	
			Leaf hoppers	
			Plant hoppers	
			Leaf roller	
			Stem borer	
			Whorl maggot	
		Barley	Aphid	400 gm
		Wheat	Cut worm	750 gm
Cotton	Red cotton bug			
	Whitefly			
	Jassid			