

AGRO-CHEMICAL TECHNICAL WITH BRAND NAME, APPLICATION, DOSE AND MODE OF ACTION

INSECTICIDES / ACARICIDES / MITICIDES				
Technical	Brand Name	Application	Dose / Acre	Mode of Action
1. Abamectin 1.8% EC	Vertimec (Syngenta), Tagmec 1.9 EC (Tropical), ABC 1.85% EC (KR)	<ul style="list-style-type: none"> ✓ Red mite of strawberry, cotton, cucumber, potato, soybean, tomato and sweet melon ✓ Leaf miners of sugarbeet 	50-100 ml/acre, 5-10 ml/pump	Chloride channel activators group. Acaricide
2. Acephate 75% SP	Starthene (Swal), Orthene (Arysta), Missile (Devidayal), Megastar (MIL), Lancer (UPL), Oval (PI Ind.), Rasayan Phate (KR), Acefex (Excel), Kingmax (Vimax), Asataf (TATA), Accent 787 (Sumil), Miltaf (IIL), Bheem (Kilpest), Tagace (Tropical), Lucid (Cheminova), Lion (SuperCSL), Sritaf (Crystal), Ortain (Coromandel), Hilphate (HIL), Ample (Advance), Rythane (Ramicides), Corohamp (CAPL), Topsis (Atul), Molphate (GP), Top'O'Top (CGI), King Phate (KCS), Acesul (Sulphur Mills), Vega (PCCPL), Pace (Nagarjuna), Topsis (Atul), Tremor (BioStadt), Ace (Canary), Willace (Willowood), Chettak (GSP), Archa (Amber), Bhoochal 75 (AOL)	<ul style="list-style-type: none"> ✓ It is particularly effective on severe infestations of sucking and chewing insects of tobacco, sugarcane, cotton, chilies, vegetables, fruits and cereals. ✓ It has low toxicity to mammals and does not harm beneficial insects. It is easy to use, being soluble in water. ✓ Green & Brown Leafhoppers, Brown Plant Hoppers ✓ ,L,L 5M58L TYF TOTOLIF H[JL R];LIF HLJFTGF IGI\+6 DF8[P 	300-400 gm/acre 20-25 gm/pump	A versatile organophosphate group insecticide with both contact and systemic action.
3. Acephate 95% SG	Hunk (TATA)	<ul style="list-style-type: none"> ✓ It targets Stem borer, leaf folder & BPH on Paddy. ✓ It has strong systemic molecule and is highly soluble and longer duration control. It has less odour and hence easy to use. It has got a good synergistic effect with Buprofezin 25% SC against rice BPH 		Belongs to the Organophosphates insecticide group. Its mode of action is Systemic
4. Acetamiprid 20% SP	Manik (TATA), Ekka (KR), Rapid (Crystal), Rekord (DuPont), Active (Devidayal), Award (MIL), King Prid (KCS), Acetacel (Excel), Aceta (UPL), Echo 797 (Sumil), Stona (Vimax), Lift (Indofil), Dhan Preet (Dhanuka), Crop Pride (NAFL), Sharp (IIL), Proud (Kilpest), Tagride (Tropical), Su-Pride (SuperCSL), Scuba (Coromandel), Hilprid (HIL), Armour (Advance), Acelon (CAPL), Albis (Atul), Quick (CLSL), Pounce (FMC), Molprid (GP), Tada (CGI), Glide (Safex), Prima (Sulphur Mills), Patron (PCCPL), Ennova (Nagarjuna), Albis (Atul), Wapkil & Rider (BioStadt), Antenna (Willowood), Nize (GSP), Shourya (Amber)	<ul style="list-style-type: none"> ✓ For Jassids, Thrips & Aphids 40-60 gm/acre & for whitefly 60-80 gm/acre in Cotton ✓ For Thrips & Aphids 40-60 gm/acre & for Whitefly 60-80 gm/acre in Chili ✓ DM,MDXL4 Y L%; TYF ;O NDFBLGF IGI\+6 DF8[✓ Aphids, Jassids, Thrips, Colorado Potato Beetle, Flea hoppers, Whiteflies, Fruit Moth, Leafhoppers, Leaf Miners, Plant Bugs ✓ It also has ovicidal property. 	40-80 gm/acre	It is world renowned insecticide of Neonicotinoids group for sucking insects. It controls the sucking insects very effectively by its extraordinary Systemic action. It has the ability to control the insects which gained resistance against other insecticides. It is compatible with other commonly used Insecticides and Fungicides. It persists in crops and hence has the ability to control the hiding insects for a longer time. It is safe for natural enemies of insect-pests hence; it is also suitable for Integrated Pest Management (IPM) programme.
5. Alpha-Cypermethrin 10% WP	Alfastar (Swal), Guru (UPL), Karfu (Kilpest), Safari (SuperCSL), Dash 5% WP (MIL), Dolphin (GSP)	<ul style="list-style-type: none"> ✓ Bollworms in cotton 	200-300 ml/acre	Contact and Stomach. Synthetic pyrethroid group
6. Alphamethrin 10% EC	Mig10 (Devidayal), Legend (MIL), Grand 301 (Sumil) Tata Alpha (TATA), Gem (Indofil), Nayak (IIL), Thrill (Tropical), Numethrin (Cheminova), Alpha (KR), Vasuki (CGI), Sixer (Sulphur Mills), Stop 10 EC (BioStadt), Alpha (Canary), Alfagold (CCIL)	<ul style="list-style-type: none"> ✓ It is synthetic and It is effective against lepidopteran and sucking pest. (SFAZL >1/4 ,L,LvE]BZL C[,IMYL; >1/4 O/K[NS >1/P S5F;4 DUO/L4 S9M/4 0F\UZ4 NLJ[,F4 ;MIALG4 VF\AF4 DZRF\4 ZL\U64 EL\OF TYF Vgl XFSEFHL DF8[f 		Broad spectrum synthetic pyrethroid insecticide and has the capability of quick knockdown effect. Synthetic pyrethroid group
7. Bifenthrin 10% EC	Hectastar (Swal), Rock (KR), Metastar (Sumil), Markar (Dhanuka), Super Star (IIL), Barnerr (Tropical), Conister (Coromandel), Centrix (Sulphur Mills), Rockstar (Shivalik), Klintop (BioStadt), Wilthrin (Willowood), Viklap (Amber)	<ul style="list-style-type: none"> ✓ R];LIF HLJFT VG[>1/MGF IGI\+6 DF8[P 	35-40 ml/pump	Synthetic pyrethroid group
8. Bifenthrin 2.5% EC	Swal Home (Swal)	<ul style="list-style-type: none"> ✓ Home use 		House hold insecticide. Synthetic pyrethroid group
9. Buprofezin 25% SC	Jawaa (DuPont), Flotis (Bayer), Trust (Swal), Irvy (Dow), Devifezin (Devidayal), Buprostar (MIL), Hillblaze (HIL), PI Bupro (PI Ind.), Applaud (TATA), Braun 111 (Sumil), Apple (Dhanuka), Phentom (IIL), Tagvoltage (Tropical), Tribune (Crystal), Ninja (Coromandel), KriMarch (KR), Cordon (Advance), Bravo (Sulphur Mills), Benj (Nagarjuna), Banzo (BioStadt), Jantar (Canary), Deligent (Willowood), Awaksh (Amber)	<ul style="list-style-type: none"> ✓ Effective on Homopterous pests such as Plant Hoppers, Leaf hoppers, White Flies, Scales and Mealy Bugs. It's an IPM compatible product. Less adverse effect on natural enemies and beneficial insects. Effectively controls green leaf hoppers and white back plant hoppers in rice. ✓ ,L,F TOTOLIF4 ;O NDFBL T[DH DL,LAUGF ;RM8 IGI\+6 DF8[P 	50 ml/pump	Its Thiazine group contact insecticide. It is an IGR (Insect Growth Regulator) New insect control agent to control stubborn rice pests. Inhibits moulting of nymphs and larvae. Inhibitors of chitin biosynthesis
10. Carbaryl 50% WP	Devicarb (Devidayal), Kavin (KR)	<ul style="list-style-type: none"> ✓ 		Carbamates group , Inhibitor of cholinesterase enzymes.
11. Carbofuran 3% GR	Furadan (FMC), Starfuron (Swal), Sumo 3G (IIL), Prachand 3G (Kilpest), Furon G (Crystal), Fury (Nagarjuna)	<ul style="list-style-type: none"> ✓ 		Carbamates group
12. Carbosulfan 25% EC	Marshal (FMC), Aatank (Dhanuka), Aayudh (Coromandel)	<ul style="list-style-type: none"> ✓ 		Carbamates group

13. Cartap Hydrochloride 4% GR	Kitap 4G (KR), Kaardon 4G (UPL), Karvan (Devidayal), Caldán 4G (Dhanuka), Cartox (TATA), Corona GR (Sumil), Beacon GR (Indofil), Indian 4G (IIL), Kildon 4G (Kilpest), Fast 4G (Tropical), Sudan 4G (SuperCSL), Nidan 4G (Crystal), Parry/Ratna (Coromandel), Hilcarpet 4GR (HIL), Trixx (Advance), Grip (SulphurMills), Captor 4G (PCCPL), Nagarjuna 4G (Nagarjuna), Capsi GR (Atul), Dartriz 4G (BioStadt), Cartap 4G (Canary), Wiltap 4G (Willowood), Prithvi 4G (Amber), Eldan 50SP (CCIL), Paras 4G (AOL)	<ul style="list-style-type: none"> ✓ For controlling Stem Borer, Leaf Folder and Whorl Maggot of Rice. ✓ CLZFOJNF s0LPALPV[DPF TYF R];LIF 5]SFZGL HLJFTMGF IGI\+6 DF8[P 	8-10 kg/acre	Systemic and Contact. Nereistoxin analogues group
14. Cartap Hydrochloride 50% SP	Kitap 50SP (KR), Startop-50 (Swal), King Dan (KCS), Kaardon 50SP (UPL), Karvan Plus (Devidayal), Caldán 50SP (Dhanuka), Corona 50 (Sumil), Beacon SP (Indofil), Indian 50SP (IIL), Kildon (Kilpest), Fast 50 (Tropical), Sudan 50 (SuperCSL), Nidan 50SP (Crystal), Josh SP (Coromandel), Hilcartap 50SP (HIL), Grip 50 (SulphurMills), Captor 50SP (PCCPL), Capsi SP (Atul), Dartriz 50SP & Woktap 50SP (BioStadt), Mantar 50SP (Canary), Wiltap 50SP (Willowood), Prithvi 50SP (Amber), Eldan 4G (CCIL), Paras 50SP (AOL)	<ul style="list-style-type: none"> ✓ Stem Borer, Leaf Folder in Rice ✓ 0F\UZDF\ UFEEFZGL >1/4 5FGJF/GFZL >1/ TYF R];LIFGF IGI\+6 DF8[P 	200-400 gm/acre & 20-30 gm/acre	Systemic and Contact. Nereistoxin analogues group
15. Chlorantraniliprole 0.4% GR	Ferterra (DuPont)	✓		Preventing the buildup of the pest population. New class of chemistry Anthralinic Diamides group
16. Chlorantraniliprole 18.5% SC	Coragen (DuPont)	<ul style="list-style-type: none"> ✓ Effective and long duration control of early and top borer in sugarcane. ✓ TDFD 5]SFZGL C9L,L >1/GF IGI\+6 DF8[P 		Preventing the buildup of the pest population. New class of chemistry Anthralinic Diamides group
17. Chlorfenapyr 10% SC	Intrepid (BASF), Lepido (PI Ind.), Record (Crystal)			Uncouples of oxidative phosphorylation via disruption of the proton gradient
18. Chlorpyrifos 1.5% DP	Deviban 1.5 DP (Devidayal), Kilzex D & Kilzex 0.25% DP (Kilpest)	✓		Non-systemic with contact, stomach & respiratory action
19. Chlorpyrifos 10% GR	Deviban 10G (Devidayal), Suldin GR (SuperCSL), Hilban 10 GR (HIL)	✓		Strong contact, stomach & slight fumigant action. It Belongs Organophosphate Insecticide group.
20. Chlorpyrifos 20% EC	Krishan 20 (KR), Starban (Swal), Dursban (Dow), Megaban (MIL), Deviban 20 (Devidayal), Chloroban (UPL), ChloroKing (KCS), Banest 20 (Arysta), Tricel 20 (Excel), Uno 501 (Sumil), Lethal 20 EC (IIL), Sacban (Shivalik), Veermet (Vimax), Tafaban (TATA), Pyrifex (Safex), Gilphos (GIL), Crop Chlor (NACL), Mig-20 (Kilpest), Tagban (Tropical), Shreeban TC (SKSCC), Classic-20 (Cheminova), Suldin (SuperCSL), Kaman / Eldrin TC (Crystal), Trishul (Coromandel), Hilban 20 (HIL), Pyrifex (Safex), Pyriban (Aimco), Kattar 20 (GKR), Hyban (HCL), All-Drin (Ambuja), Sulban (SulphurMills), Lynch (PCCPL), Strike 20EC (BioStadt), Dangan (Canary), Chlorocil (GSP), Kartoos (Amber), Gold Ban (CCIL), Potta (AOL)	<ul style="list-style-type: none"> ✓ It is commonly used in the control of Fruit Borers, Stem Borers and Leaf Eating Caterpillars on a wide range of Crops like Cotton, Pulses, Oilseeds, Rice etc. Aphids, Ants, Armyworm, Milly bugs, Chinch Bugs, Corn Borers, Corn Earworm, Corn Rootworm, Cotton Leafworm, Cutworms, Flea Beetles, Grasshoppers, Grubs, Lesser Cornstalk Borer, Locusts, Mole Crickets, Seedcorn Maggot, Sowbugs, Hispa, Leaf Roller, Gall Midge, Stem Borer, Aphid, Pod Borer, Cutworm, Black Bug, Early Shoot & Stalk Borer, Pyrilla, Ballworm, White Fly, Grey Weevil, Root Grub, Shoot & Fruit Borer, DBM, Leafhopper, Black Citrus Aphid, Ground Beetle, Locust Hopper. ✓ R];LIF 5]SFZGL HLJFT TYF >1/ T[DH pW>GF IGI\+6 DF8[P 	50 ml/pump	Non-systemic with broad spectrum contact, stomach and respiratory action with vapor action and a quick knockdown effect. It Belongs Organophosphate Insecticide group.
21. Chlorpyrifos 50% EC	Krishan 50 (KR), Predator (Dow), Tricel 48 EC (Excel), Megaban Super (MIL), Deviban TC (Devidayal), Sacban (Shivalik), Chowkidar (GIL), Lethal 50 (IIL), Tagban-TC (Tropical), Integer (Coromandel), Hilban 50 (HIL), Leafan-50 (Advance), Oshchlor (Oshnic), Kartoos 50 (Amber), Gold Ban TC (CCIL), Hitlor (AOL)	<ul style="list-style-type: none"> ✓ 0]\B T[DH O/ SMZL BFGFZ >1/M4 pW.4 Z; R];TL HLJFTMP SSF;4 DUO/L4 R6F4 T]J[Z4 T,4 XFSEFHL TYF NZ[S 5FSMDF\ pW> IGI\+6 DF8[P ✓ B[TLJFOL TYF AF\WSFD IJ:TFZDF\ pW>GF IGI\+6 DF8[P 	40-50 ml/pump	Non-systemic with contact, stomach & respiratory action. It Belongs Organophosphate Insecticide group.
22. Chromafenozide 80% WP	Dodger (PI Ind.)	✓		It Belongs Organophosphate Insecticide group.
23. Clothianidin 50% WDG	Dentotsu (Sumitomo)	✓	50 gm/kg of seed	Insecticide of Neonicotinoids group
24. Cypermethrin 10% EC	Kricyp-10 (KR), Starcip-10 (Swal), Megatrin (MIL), Cyper King (KCS), Ustaad (UPL), Devicyper 10 (Devidayal), SuperKiller 10 (Dhanuka), Cypermil (IIL), Cypercot 10 E (Kilpest), Challenger 10 (Tropical), Shakti-10 (Cheminova), Super Jet (SuperCSL), Cypercil (GSP), Action-10 (CCIL), Shera 10 (AOL)	✓	350-500 ml/acre	Non-systemic, Contact & Stomach. Synthetic pyrethroid group
25. Cypermethrin 25% EC	Cymbush (Syngenta) , Kricyp-25 (KR), Starcip-25 (Swal), Megacyper (MIL), Cyrux (UPL), Colt (PI Ind.), Devicyprin 25 (Devidayal), MaxKill (Vimax), Pyro 401 (Sumil), Super Killer 25 (Dhanuka), Crop Cyper (NACL), Super Fighter (IIL), Cypercot 25E (Kilpest), Challenger 25 (Tropical), Shakti-25 (Cheminova), Super Jet+ (SuperCSL), Jackpot-25 (Crystal), Cyperkill (Coromandel), Hirange 25EC (Yesell), Cypersul 25 (Sulphur	<ul style="list-style-type: none"> ✓ Bollworms, DBM, Fruit and Shoot Borers mainly in Cotton, Cabbage, Vegetables ✓ >1/GF IGI\+6 DF8[P 	220-300 ml / acre & 30-40 ml/pump	Non-systemic, Contact & Stomach. Synthetic pyrethroid group

	Mills), Auzar 25EC (BioStadt), Cyper (Canary), Cobra (GSP), Anth (Amber), Action-25 (CCIL), Shera 25 (AOL)			
26. Cypermethrin 5% EC	Smash 5 EC (BioStadt)	✓		
27. Deltamethrin 11% EC	Decis 100 (Bayer)	✓ Boll worm in cotton, Fruit borer in tomato, chili and okra, leaf folder, stem borer, whorl maggot, green leaf hopper in rice. ✓ Control of chewing and sucking insects. Effective against a wide range of insect pests, which include Lepidoptera, Homoptera; particularly Aphids and Psylla but also some Coccidea and Cicadellinae, Heteroptera, Thysanoptera; selected thrips species, Diptera, Coleoptera and Orthoptera.		Synthetic pyrethroid group. It is non systemic insecticide which acts by contact and ingestion, and exhibiting a broad spectrum
28. Deltamethrin 2.8% EC	Decis 2.8 (Bayer), Shastra (Devidayal), Tagcis 100 – 11% EC (Tropical), Tagcis & Tagcis Flow 2.5% SC (Tropical)	✓ Boll worm & sucking pests in cotton, thrips, leaf roller & semi-looper in tea, shoot & fruit borer and jassid in okra, leaf miner in groundnut, hopper in mango, fruit borer, Heliothis and Spodoptera in chili, heliothis in chickpea, shoot and fruit borer in brinjal, pod borer and pod fly in red gram.		Neurotoxin acting primarily on the basal ganglia of the central nervous system. Synthetic pyrethroid group
29. Diafenthiuron 50% SP	Polo/Pegasus (Syngenta), Krijet/Krijet Super (KR), Alero (Sumil), Logo/Gama (ILL), Ferotia (Coromandel), Derby (BioStadt), Ruby/Declare (GSP)	✓ VIT VFW]IGS SFI"5wWIT WZFJT\ \ R];LIF 5]SFZGL sSYLZL4 ;O[NDFBLF HLJFTM 5Z V;ZSFZS IGI\+6 SZT] VFNX" SL8GFXSP	25 gm/pump	Organotinic miticides group. Inhibitors of mitochondrial ATP synthase
30. Dichlorovos (DDVP) 76% EC	Doom (UPL), Fume (KR), Starchlor (Swal), Divine (MIL), Devikol (Devidayal), DDVP King (KCS), Divap (PI Ind.), Crywap 75 EC (Vimax), Kush 760 (Sumil), Nuvan (ILL), Kilvos 76 E (Kilpest), Divipan (Tropical), Suvan (SuperCSL), Marvex Super (Coromandel), Hilvos (HIL), Avon (Advance), Hyvap (HCL), Demand (Sulphur Mills), Drone (PCCPL), Steamer (Canary), Haq (Amber), Badal 76 (Bharat), Nuvos (CCIL)	✓ 5FG BFJFJ/L4 5FG SMZGFZ4 5FG JF/JFJ/L4 3MOLIF >1/4 HL\OJFGL >1/4 SFTZF4 ,xSZL >1/M4 O/ SMZL BFGFZ >1/MP ✓ ;FJWFG5]"]S VFGM p5IMU 5X]VMG[AF\WJFGL UDF6DF\ DFBLGF p5N=JG[SFA]DF\ ,JF DF8[P ✓ BHP, Leaf Folder, Army Worm, Leaf Eating, Caterpillar, Red pumpkin Beetle, Pyrilla	250-350 ml/acre	Contact & Stomach Fumigation action
31. Dicofol 18.5% EC	Klin (KR), Starkel (Swal), Tiktok (UPL), Might (Devidayal), Sumfol (Sumil), Colonel-S (Indofil), Tagfol (Tropical), Hilfol 18.5 & 46 EC (HIL), Difol 18.5 SC (Sulphur Mills)			Non-systemic, Contact
32. Diflubenzuron 2% GR	Barcelo GR (Bayer)	✓ Used for the control of mosquito larvae in water bodies like cesspits, drains, disused wells and pools.	1.25-3.0 kg/ha in clear water	Diflubenzuron is an insect growth regulator which interferes with formation of chitin during the moulting process of the insect larvae.
33. Diflubenzuron 2% TB	Barcelo TB (Bayer)	✓ used for control of mosquito larvae of <i>Aedes aegypti</i> , <i>Anopheles stephensi</i> and <i>Culex quinquefasciatus</i> in unused coolers	0.5-1.0 ppm / 40 lit. of water	As per above
34. Dimethoate 30% EC	Rogor (Cheminova), Tara-909 (Swal), Nugor (UPL), Progor (Pioneer), Devigon 30 (Devidayal), Tafgor (TATA), Crop Diamond (NACL), Rogorin (ILL), Kilgore 30 E (Kilpest), Tagore (Tropical), Kigor (SKACC)	✓ It is highly effective in controlling the sucking and caterpillar pests .		Systemic, contact & stomach. It is highly compatible with other insecticides & fungicides. It Belongs Organophosphate Insecticide group.
35. Dinotefuran 20% SG	Osheen (PI Ind.), Token (Indofil), Oshin 20SG (BioStadt)			Neonicotinoids group
36. Emamectin Benzoate 5% SG	Proclaim (Syngenta), Missile (Crystal), Emstar 5 (KR), Starclaim (Swal), Robot (Excel), Spolit (UPL), Empower (Sumil), Tatal (Gharda), Wegon (Vimax), EM-1 (Dhanuka), Xplode (ILL), Benzer (Coromandel), Emzet (Sulphur Mills), Trust (Nagarjuna), Bioclaim & Inclaim (BioStadt), Claim (Canary), Emacto (Willowood), Proceed (Amber)	✓ Tea Totrix, Stem Borel, DBM, Bollworm, Leaf Folder, Fruit & Shoot Borer in Cotton, Okra ✓ >1/MGF V;ZSFZS IGI\+6 DF8[P	80-100 gm/acre	Contact & Stomach. Chloride channel activators group
37. Endosulfan 35% EC	Endostar (Swal), Thiokill (UPL), King Sulfan (KCS), Crop Endo (NACL), Kildofan (Kilpest), Su Sulfan (SuperCSL), Hildan (HIL), Dhira (PCCPL), Endon (CCIL)			It belong to Cyclodiene Organochlorines group of insecticide
38. Endosulfan 4% DP	Kildofan 4DP (Kilpest)			Organochlorine group
39. Ethion 50% EC	Tafethion (TATA), Krithion (KR), Mit-505 (Swal), Mitkill (UPL), King Mite (KCS), Fosmite (PI Ind.), Deviastra (Devidayal), Vithion (Vimax), Fighter (Kilpest), Sumite (SuperCSL), Hilmitte (HIL), Shakti (IPL)	✓ . It is very effective against Mites especially on Chillies, Cotton, Fruits and Vegetables.		It is an Organophosphorus Insecticide & Acaricide with quick knock down and long lasting residual activity. Non-systemic with predominantly contact action
40. Etofenprox 10% EC	Trebon Excel 10EC (BioStadt)			Synthetic pyrethroid group
41. Etofenprox 30% EC	Dash 30EC (BioStadt)			Synthetic pyrethroid group
42. Fenobucarb (BPMC) 50% EC	Knock (KR), Hulchul (Devidayal), Blast (Tropical), Hopcide 50EC (BioStadt), Break (Willowood), Aandhi (Bharat)	✓ Used to control hoppers.		Non-systemic insecticide with contact action. Carbamates group
43. Fenpropathrin 10% EC	Danitol (Sumitomo)	✓ Pink bollworm, spotted bollworm and 3merican bollworm		Insecticide

44. Fenpropathrin 30% EC	Meothrin (Sumitomo)	✓ Major pests in cotton, chilli, brinjal, okra and tea		Insecticide and acaricide
45. Fenpyroximate 5% EC	Sedna (TATA), K-Mit (KR), Pyromite (Excel), Dynamite Plus (IIL), Wilgate (Willowood)	✓ Leafhoppers, Mealybugs, Mites, Psyllam Red Spider Mite, Pink Mite, Purple Mite, Yellow Mite ✓ VITXISTXF/L SYLZLGFXS4 AWF H :8[HGL SYLZL p5Z ;O/TF5J"S IGI\+6P	20-30 ml/pump	It is acaricide, recommended for Yellow mites in chilli.
46. Fenvalerate 0.4% DP	Devifen 0.4 DP (Devidayal), Fencot 0.4 D (Kilpest)	✓ As per above-----do-----		Non-systemic, contact & stomach action. Synthetic pyrethroid group
47. Fenvalerate 20% EC	Krifan (KR), Fenkill (UPL), King Pen (KCS), Fenval 20 EC (Isagro Asia), Devifen 20 (Devidayal), Tatafen 10 EC (TATA), Fencot 20 E (Kilpest), Final 20 (AOL)	It is Photostable and has quick action against a number of Chewing, Sucking and Boring insects on a wide variety of Crops. It is also used as an Animal Ectoparasiticide and is highly useful for control of Termites in Agriculture, Forestry and in buildings.		Non-systemic, contact & stomach action. Synthetic Pyrethroid Insecticide.
48. Fipronil 0.3% GR	Regent GR (Bayer) , Ruler 0.3GR (KR), Stargazette GR (Swal), Devigent 0.3GR (Devidayal), Sonic (TATA), Florina GR (Sumil), Fax GR (Dhanuka), Sargent GR (IIL), Tagagent GR (Tropical), Su-Nil GR (SuperCSL), Salvo GR (Coromandel), Fiprox G (Sulphur Mills), Avtar (PCCPL), Monil (Atul), Janbaaz GR (BioStadt), Fipro 0.3 (Canary), Vycm (Amber)	✓ Stem Borer, Brown Plant Hopper Leaf Folder, Whorl Maggot, Green Leaf Hopper, White Backed Plant Hopper, Gall midge of rice, early shoot borer and root borer and termite of sugarcane ✓ R];LIF HLJFT4 >I/ T[DH pW.GF V;ZSFZS IGI\+6 DF8[P	10 kg/acre	It acts as broad spectrum Granular insecticide belongs to Phenyl Pyrazoles group . Contact and ingestion type of molecule. Disrupts the insect's central nervous system by blocking the passage of chloride ions through the GABA receptor, an inhibitor of the central nervous system.
49. Fipronil 2.92% EC	Agenda 25 EC (Bayer)	✓ Used for the control of termites in buildings through pre & post construction treatments. Dilute 100 ml of formulation in 1 L of water for the control of termites in buildings during pre and post construction anti termite treatment.	100 ml/1 Lit. of water	Fipronil disrupts normal nerve influx transmission (e.g. passage of chloride ions) by targeting the GABA-gated chloride channel, causes excessive neural excitation, severe paralysis, and insect death. It is also considered a selective GABA antagonist because it shows a greater binding affinity to insect than to mammal GABA receptors.
50. Fipronil 5% SC	Regent SC (Bayer) , Ruler (KR), Stargazette (Swal), Sonic Flo (TATA), Devigent Plus (Devidayal), Fipro King (KCS), Vizent (Vimax), Sonic Flo (TATA), Rabid (CLSL), Florina 444 (Sumil), Mahaveer (Gharda), Fax SC (Dhanuka), Sargent SC (IIL), Tagagent SC (Tropical), Su-Nil (SuperCSL), Crigent SC (Crystal), Salvo SC (Coromandel), Frazer (Advance), Fipros EC (Oshnic), Fiprox (Sulphur Mills), Monil SC (Atul), Janbaaz SC (BioStadt), Getter (Canary), Refree (GSP)	✓ It targets Stem borer, BPH, Green leaf hopper, Leaf folder, Gall midge, White backed plant hopper, Whorl maggot on paddy, DBM on Cabbage, Thrips, Aphids, fruit borer on chilli, early root and shoot borer on sugarcane. ✓ Y L%;4 X[ZOL TYF OF\UZDF\ p5N=J SZTL .I/M T[DH pW.GF V;ZSFZS IGI\+6 DF8[P	25-30 ml/pump	Belongs to the Phenyl pyrazoles group . Its mode of action is Contact and Systemic. Its features are wide spectrum, longer persistence and has phytotoxic effect
51. Fipronil 80% WG	Jump (Bayer) , Ruler 80 (KR)	✓ Stem borer and leaf folder in rice and thrips in grape ✓ OF\UZGF 5FSD\F R];LIF HLJFTMGF IGI\+6 DF8[P	6-9 gm/pump	Belongs to the Phenyl pyrazoles group .
52. Flubendiamide 20% WG	Fluton (PI Ind.), Takumi (TATA), Suraksha (Nagarjuna)	✓ Recommended for Heliothis in cotton and Rice stem borer.		Anthralinic Diamides group
53. Flubendiamide 39.35% SC	Fame (Bayer)	✓ Boll worm in cotton, stem borer and leaf folder in rice, fruit borer in tomato, DBM in cabbage, pod borer in pigeon pea, black gram and Bengal gram, fruit borer in chilli and brinjal, shoot borer in brinjal		First representative of a new chemical insecticide classes - the diamides . In contrast to other insecticide classes targeting the insect nervous system, it acts at receptors in insect muscles causing an immediate cessation of feeding and thus avoids crop damage.
54. Hexythiazox 5.45% EC	Endurer (Coromandel), Dimite (Nagarjuna), Xmite & Maiden (BioStadt)	✓ For the effective control of mite		Mite growth inhibitors (Clofentazine hexythiazox) group
55. Imidachloprid 17.8% SL	Confidor (Bayer) , Seamer (DuPont), Josh (KR), Imidastar (Swal), Imiden (Dow), Courage (MIL), Midas 2000 (Devidayal), King Dor (KCS), Jumbo (PI Ind.), Imidacel 17.8 & 20 (Excel), Imida Gold (UPL), Expert 100 (Sumil), Saccor (Shivalik), V-Mida (Vimax), Tatamida (TATA), Imigrow (CLSL), Expert 100 (Sumil), Atom (Indofil), Media (Dhanuka), Crop Mida (NACL), Victor (IIL), Kildor (Kilpest), Tropical Magic (Tropical), Chemida (Cheminova), Sumida (SuperCSL), Parymida (Coromandel), Himida (HIL), Hotshot (Sulphur Mills), Radiant (PCCPL), Mida (Nagarjuna), Ribo (Atul), Ultimo 200SL (BioStadt), Farrata (Canary), Leopard 17.8 SL (Willowood), Imidore (CCIL), Midas (AOL)	✓ For the control of Homopteran insects like Aphids, Whiteflies, Hoppers etc. It is recommended for control of Aphids, Jassids, Thrips and Whiteflies in Cotton, Brown Plant Hoppers, White Backed Plant Hoppers and Green Leaf Hoppers in Rice, Jassids, aphids and thrips in Chilli, Hoppers in Mango and Termites in Sugarcane. ✓ NZ[S 5 SFZGL R];LIF HLJFTMGF V;ZSFZS IGI\+6 DF8[P	70-100 ml/acre 15 ml/pump	It belongs to the modern Neonicotinoids group of insecticides. It a remarkably high systemic activity. Long duration control over pests as compared to conventional insecticides is the most distinct characteristic.
56. Imidachloprid 30.5% SC	Confidor Super (Bayer) , Josh Plus (KR), Protect (MIL), Super King (KCS), Jumbo (PI Ind.), MaxMida (Vimax), Termox (TATA), Expert Super (Sumil), Victor Super (IIL), Tropical Magic Super (Tropical), Sumida 30.5 (SuperCSL), Confidence Super (Crystal), Total Control (Oshnic), Hotshot Plus (Sulphur Mills), Leopard 30.5 SC (Willowood), Punj Super (Amber)	✓ For control of termites in buildings, which can be, used both for pre and post construction treatment. It is first non-repellent liquid Termiticide with a unique mode of action to control even toughest subterranean termite infestations through a process called "Lateral Soil Movement". (pW>GF V;ZSFZS IGI\+6 DF8[Pf ✓ Aphid, Jassids and thrips in chilli and BPH & WBPH in rice	5-6 ml/pump	It is a new generation Termiticide. It is a novel insecticide belonging to new generation Neonicotinoids group of chemicals with systemic action

57. Imidachloprid 48% SL/FS	Gaucha 48 FS (Bayer), Imigo 600 FS (UPL), Tatamida 600 FS (TATA), Tropical Magic 600 FS (Tropical)	✓ For controlling sucking pests such as Jassids, Aphids, Whitefly and Thrips in cotton, okra & Sunflower.	5-9 gm/kg of seed for seed treatment	It is a novel insecticide belonging to new generation Neonicotinoids group of chemicals with systemic action
58. Imidachloprid 70% WG / WS	Admire (Bayer), Tatamida 70WS (TATA), Josh 70 (KR), Dzire (Excel), Global 777 (Sumil), Ad-Fyre (Dhanuka), Victor Plus (IIL), Tagmyre & Tropical Magic 70WS (Tropical), Pactus (Cheminova), Sumida 70 WG (SuperCSL), Looper & Confidence 555 WS (Crystal), Hilmida WS (HIL), Pronto (Sulphur Mills), Eka (PCCPL), Mida-G (Nagarjuna), Edan (BioStadt), Hamster (Canary), Leopard 70WG (Willowood), Jatan (Amber)	✓ Used for seed treatment for control of sucking pests in Cotton, Okra and Chili viz., Aphids, Jassids, Colorado Potato Beetle, Brown Plant hoppers, Rice Hoppers, Termites, Whiteflies, Thrips, White Backed Plant hoppers (ALHGF 58 DF8[4 NZ[S 5]SFZGL R];LIF HLJFTMGF V;ZSFZS IGI\+6 DF8[PF	3-5 gm/kg seed for seed treatment	It is a novel insecticide belonging to new generation Neonicotinoids group of chemicals with systemic action
59. Indoxacarb 14.5% SC	Avaunt (DuPont), Care (KR), Fego (UPL), Index (Devidayal), Vindoxa (Vimax), Indimax (Sumil), Dhawa Gold (Dhanuka), Avval (IIL), Kaal (Kilpest), Tagpower (Tropical), Super Indoxa (SuperCSL), Vantage (Sulphur Mills), Amsac (Atul), Indica (Willowood), Arav (Amber), Super Doxa (AOL)	✓ Boll Worm, Fruit Borer, Pod Borer in Cotton, Tomato, Chili, Pigeon pea ✓ >I/GF IGI\+6 DF8[P	160-200 ml/acre & 10-20 ml/pump	Contact Poison. Voltage dependent sodium channel blockers group
60. Lambda Cyhalothrin 2.5% EC	Lambdastar (Swal), Ninja (Devidayal), Reeva 2.5 (TATA), Flex 801 (Sumil), Agent Plus (Indofil), Bravo 2500 (IIL), Sumo (Kilpest), Demand (Tropical), Spider (SuperCSL), Judo (Crystal), Hillambda (HIL), Jaguar (Sulphur Mills), Xylo (Atul), Kozuka (BioStadt), Lambada2.5 (Canary), Samurai (GSP)	✓ It is recommended for control of Bollworms, Jassids and Thrips in Cotton and Leaf Roller, Stem Borer, GLH, Gall midge, Hispa and Thrips in Rice. ✓ S5F;GL .I/MGL NZ[S VJ:YF H[JL S[>0F4 >I/M T[DH 5]bT SL8SMG] IGI\+64 R];LIF HLJFTMo ,L,L 5M58L4 Y L%;4 DM,MvDXLG] VF\IXS IGI\+6P ;,64 0]\U/L4 A8FSFDF\ Y L%; DF8[P 0F\UZDF\ UFEDFZFL >I/4 5FG JF/GFZL >I/P	20-25 ml/pump	Non-systemic, contact & stomach action & repellent properties. New generation synthetic pyrethroid group insecticide. It controls a wide spectrum of chewing pests belonging to Lepidoptera and Coleoptera in crops such as cereals, ornamentals, potatoes, vegetables, cotton and other crops. It has moderate effect on sucking pests, which is an advantage over the conventional pyrethroids.
61. Lambda Cyhalothrin 10% WP	Icon (Syngenta)	✓		Synthetic pyrethroid group
62. Lambda Cyhalothrin 4.9% CS	Matador (Syngenta), LOC++ (KR), Novell (Sumil), Metro (IIL), Challenger (Sulphur Mills), Farata (Canary), Spanner (GSP), Sip (Amber)	✓ R];LIF 5 SFZGL HLJFT TYF >I/GF ;\I]ST IGI\+6 DF8[P	20-25 ml/pump	Synthetic pyrethroid group
63. Lambda Cyhalothrin 5% EC	Karate (Syngenta), LOC-5 (KR), Judo (Devidayal), Richo (Vimax), Reeva 5 (TATA), Dragon 701 (Sumil), Bravo 5000 (IIL), Sumo Plus (Kilpest), Tag Command (Tropical), Spider Plus (SuperCSL), Judo Plus (Crystal), Hillambda (HIL), Lakshya (Advance), Judho 5 EC (Yesell), Mustang (Sulphur Mills), Ray (PCCPL), Xylo-5 (Atul), Lambada5 (Canary), Sunny (Willowood), Santri (GSP), Remand (Amber), Kataar (CCIL), Thiachi (AOL)	✓ Recommended for the control of Bollworms, Jassids and Thrips in Cotton, Leaf Hopper, Stem Borer, GLH, Gall Midge, Hispa, BPH & WBPH, Whorl Maggot in Rice, Shoot and Fruit Borer in Brinjal, Fruit Borer in Tomato. ✓ S5F;GL .I/MGL NZ[S VJ:YF H[JL S[>0F4 >I/M T[DH 5]bT SL8SMG] IGI\+64 R];LIF HLJFTMo ,L,L 5M58L4 Y L%;4 DM,MvDXLG] VF\IXS IGI\+6P ;,64 0]\U/L4 A8FSFDF\ Y L%; DF8[P 0F\UZDF\ UFEDFZFL >I/4 5FG JF/GFZL >I/P	20-25 ml/pump	Non-systemic, contact & stomach action & repellent properties with little fumigant action. It is a modern Synthetic Pyrethroid Effective in Integrated Pest Management. Synthetic pyrethroid group
64. Malathion 5% DP	Devimalt 5 DP (Devidayal), Kropmal D (Kilpest)	✓		Contact, stomach & respiratory action. It Belongs Organophosphate Insecticide group.
65. Malathion 50% EC	Kthion (KR), Devimalt 50 (Devidayal), Milthion (IIL), Lakshya (Kilpest), Tagthion (Tropical), Cythion (Coromandel), Hilmala / Hilthion (HIL), Sulmathion (Sulphur Mills), Malathion 57EC (BioStadt)	✓		Contact, stomach & respiratory action. It Belongs Organophosphate Insecticide group.
66. Metaflumizone 22% SC	Tagline (Tropical)	✓		Voltage dependent sodium channel blockers group
67. Metaldehyde 2.5% DP	Snailkil (PI Ind.)	✓		
68. Methomil 40% SP	Kinet (KR), Lannate (DuPont), Dunet (Dhanuka), Dash (Indofil), Draagon (Tropical), Scorpio (Sulphur Mills)	✓	300-500 ml	Carbamates group
69. Methyl Parathion 2% DP	Gramexin (Pioneer), Devithion 2DP (Devidayal), Kildot 2DP (Kilpest), Tagpar (Tropical)	✓		Non-systemic, contact, stomach, and some respiratory action. It Belongs Organophosphate Insecticide group.
70. Methyl Parathion 50% EC	Devithion 50 (Devidayal), Kildot 50 E (Kilpest)	✓		Non-systemic, contact, stomach, and some respiratory action. It Belongs Organophosphate Insecticide group.
71. Monocrotophos 36% SL	Phoskill (UPL), Rasayanphos (KR), Monostar (Swal), Megamono (MIL), King Phos (KCS), Crotoceal (Excel), Devimono (Devidayal), Monocip (Vimax), Monogil (GIL), Kevin 360 (Sumil), Crop Mono (NACL), Monocil (IIL), Kilphex 36% WSC (Kilpest), Macrophos (Tropical), Sumo (SuperCSL), Lumphos (Crystal), Parryfos/Monophos (Coromandel), Hilcron (HIL), Admono (Advance), Monofos 36 (Safex), Monosul (Sulphur Mills), Shura (PCCPL)	✓ Beet Armyworm, Boll Weevil, Bollworm, Fleahoppers, Lygus Plant Bugs, Mites, Cutworm, Lesser Cornstalk Borer, Peach Aphid, Tobacco Bud Worm, Tobacco Hornworm, Vegetable Weevil. BPH, GLH, Leaf Folder, Yellow Stem borer, Pod Borer, Bollworms, Aphid, Jassid, Thrips, Whitefly in Paddy, Pulses, Cotton	350-500 ml/acre	Systemic and Contact. It Belongs Organophosphate Insecticide group.
72. Niclosamide 70% WP	Deadbol 70WP (BioStadt)	✓		Anthralinic Diamides group

73. Novaluron 10% EC	Rimon (Indofil), Noval (KR), Remostar (Swal), Novamax (Vimax), DNA (Willowood)	✓			IGR (Insect Growth Regulator) group
74. Permethrin 25% EC	Perkill (UPL), Agniban (Devidayal), Hawk (ILL), Tag Bush (Tropical), Permasect (Coromandel)	✓			Contact & stomach action, having a slight repellent effect. Synthetic pyrethroid group
75. Phenthoate 50% EC	Phendal (Coromandel), Salvo 50EC (BioStadt)				
76. Phorate 10% SG/CG	Foratox (PI Ind.), Kaymet (KR), Starphor 10G (Swal), Umet (UPL), Thimet 10CG (ILL), Tuskar 10 G (Kilpest), Helmet (Tropical), Sriphort (Crystal), Hilforate CG (HIL), Hilmet 10G (Canary)	✓	Stem Borer, Hoppers, Shoot fly, Aphid, Borers, Sucking Pest in Paddy, Sorghum, Sugarcane, Vegetables	5-10 kg/acre	Systemic and Contact
77. Phosphamidon 40% SL	Starmidon (Swal), Kinadon Plus (UPL), Don 400 (Devidayal)	✓	Sucking Pest, Leaf Folder, Stem Borer, Bollworms in Rice, Paddy, Cotton, Chilli, Potato, Brinjal, Banana, Mango	350-500 ml/acre	Systemic
78. Profenophos 50% EC	Curacron (Syngenta), Celcron (Excel), Jashn (TATA), Kriphos (KR), Proven (MIL), King Cron (KCS), Carina (PI Ind.), Devi-soldier (Devidayal), Profenofos 50 EC (GAICL), Banjo (ILL), Maxcron (Vimax), Jashn (TATA), Bahadur 201- 40% (Sumil), Tagpro (Tropical), Aurifos (Cheminova), Sucron (SuperCSL), Kilcron (Crystal), Ajanta (Coromandel), Hilfos (HIL), Laser (Advance), Profos (Sulphur Mills), Kombat (PCCPL), Profex (Nagarjuna), Orax (Atul), Prahar & Prudent (BioStadt), Simcron (GSP), Profax (AOL)	✓	It controls wide range of harmful chewing and sucking insects. It is a proven ovicide. It effectively controls the Aphids, Jassids, Thrips, White fly and Boll worms. ✓ R];LIF 5 SFZGL HLJFT4 > QF TYF GFGL >I/GF IGI\+6 DF8[50 ml/pump	It belongs to a group called Organophosphate. Non-systemic insecticide & Acaricide with contact & stomach action.
79. Propergite 57% EC	Omite (Dhanuka), Propastar (Swal), Simbaa (PI Ind.), Mastamite (Chemtura), Teeka (Nagarjuna)	✓		400-600 ml/acre	Organotinic miticides group. Inhibitors of mitochondrial ATP synthase
80. Pymetrozine 50% WG	Chess (Syngenta)	✓	Immediate aphid and whitefly control ✓ Aphid 80gm/acre and whitefly 240 gm/acre	80-240 gm/acre	Excellent tool for IPM and IRM programmes. Pymetrozine (Selective Homopteran feeding blockers) group
81. Quinalphos 1.5% DP	Deviquin 1.5 DP (Devidayal), Keterphos 1.5 D (Kilpest)	✓			Contact and stomach action
82. Quinalphos 25% EC	Ekalux (Syngenta), Krilux (KR), Starlux 25 EC (Swal), Deviquin 25 (Devidayal), Virsta (Vimax), Flash (Indofil), Keterphos 25 E (Kilpest), Vazra-25 (Cheminova), Hilquin (HIL), Battle (GKR), Krush (BioStadt)	✓	For the control of termites in groundnut		Contact and stomach action
83. Spinosad 2.5% EC	Success (Dow)	✓	It has got the new mode of action that effectively controls the targeted insects. It is highly safe to natural enemies.		Spinosad is a fermented product. It is a contact insecticide. It also provides long duration control. Macrocyclic lactone (Spinosyns) group
84. Spinosad 45% SC	Spintor (Bayer), Tracer (Dow), One-Up (Dhanuka), Taffin (TATA), Conserve (Nagarjuna),	✓	Aphid, jassids, shoot & fruit borer in brinjal and girdle beetle and semilooper of soybean ✓ It has got the new mode of action that effectively controls the targeted insects. It is highly safe to natural enemies.	60 ml/acre 6 ml/pump	Spinosad is a fermented product. It is a contact insecticide. It also provides long duration control. Macrocyclic lactone (Spinosyns) group
85. Spiromesifen 22.9% SC	Oberon (Bayer), Voltage (PI Ind.)	✓	Red spider mite of brinjal, tea, okra and apple, European red mite in apple, yellow mite of chili, white fly and mite of tomato and cotton	250 ml/acre 25 ml/pump	Novel foliar contact insecticide / acaricide belonging to the chemical class of Ketoenols. It has been developed world wide for the control of mites and whitefly on vegetables, fruits, cotton and tea. The product is active against all the developmental stages of mites and whiteflies resulting in long lasting control. It is safe on beneficial insects and with its new mode of action offers excellent management of resistant whiteflies and mites.
86. Temephos 50% EC	Terminate (Devidayal)	✓			Non-systemic
87. Thiacloprid 21.7% SC	Alanto (Bayer), Splendour (Cheminova)	✓	Aphid, Jassids, thrips, whitefly in cotton, stem borer in paddy, thrips in chili and apple, mosquito bug in tea, shoot and fruit borer in brinjal, girdle beetle in soybean.	100 ml/acre 10 ml/pump	Neonicotinoids group. Broad spectrum of pests. Rain-fastness property is stable even under conditions of heavy rains and sunlight providing longer persistence.
88. Thiodicarb 75% WP	Larvin (Bayer)	✓	Boll worm in cotton, DBM in cabbage, shoot and fruit borer in brinjal, fruit borer in chili, pod borer in black gram and pigeon pea.		It is a carbamate insecticide very effective against lepidopteran pests. Larvin is best suited for pest management programmes because it exhibits combined ovicidal, larvicidal, adulticidal and residual activity. Larvin, being a strong stomach poison provides the best solution for the control of gregarious polyphagous leaf feeders like Spodoptera spp.
89. Thiamethoxam 25% WG	Actara (Syngenta), Kri-Oxm (KR), Battalion (Swal), Theme (MIL), King Tara (KCS), Maxima (PI Ind.), Wonderex (Excel), Renova (UPL), Devitara (Devidayal), Maestro 707 (Sumil), Maxtara (Vimax), Giltara (GIL), Click (Indofil), Areva (Dhanuka), Arrow (ILL), Actor (Kilpest), Tagxone (Tropical), Super Tara (SuperCSL), Extra Super (Crystal), Opra (Coromandel), Spike	✓	Stem Borer, Gall Midge, Leaf Folder, White Backed Plant hoppers, Brown Plant hoppers, Green Leaf Hooper, Thrips, Hoppers, Jassids, Aphid, Whitefly. Rapidly taken up into the plant and transported acropetally in the xylem.	40-80 gm/acre & 8-10 gm/pump	Systemic, Contact & Stomach. Neonicotinoids group

	(Sulphur Mills), Dxtar (Nagarjuna), Spora (Atul), Evident & Tiomax (BioStadt), Willoxam (Willowood), Abhedh (Amber), Agrostar (AOL)	✓ NZ[S 5 SFZGL R];LIF HLJFTMGF V;ZSFZS IGI\+6 DF8[P		
90. Thiamethoxam 30% FS	Slayer Pro (GSP), Abhedh Super (Amber),(Sumil)	✓ Used for seed treatment in groundnut for white grub.		Neonicotinoids group
91. Thiamethoxam 70% WS	Slayer (GSP)	✓		Neonicotinoids group
92. Thiamethoxam 75% SG	Capcadis (Syngenta)	✓ Termite and white grub in groundnut sDUO/LDF\ pW> VG[0M/GF IGI\+6 DF8[f 50 gm/acre. Jassids and other soil insects s0F\UZDF\ ,L,F R];LIF VG[Vgl HDLGHgt HLJFTMGF IGI\+6 DF8[f 60 gm/acre. Termite and shoot borer in sugarcane sX[ZOLDF\ pW> VG[0]\B SMZL BFGFZ >I/GF IGI\+6 DF8[f 65 gm/acre	50-65 gm/acre As a Soil application with fertilizer or sand	Systemic, contact and stomach action. Neonicotinoids group
93. Triazophos 20% EC	Jane 20% (KR)	✓ As per above		Organophosphates group
94. Triazophos 40% EC	Josh (UPL), Tarzan (KR), Triazostar (Swal), Truzo (MIL), Trizocel (Excel), Current 440 (Devidayal), Traz (Sumil), Ghatak (Dhanuka), Crop Tryzo (NACL), Titan (IIL), Kilthion (Kilpest), Kargil (Tropical), Trifos-40 (Cheminova), Suthion (SuperCSL), Hilazofos (HIL), Trizo (Advance), Triaceo (Sulphur Mills), Myza (Atul), Fulstop 40EC (BioStadt), Wilphos (Willowood), Trizo (GSP), Devak (Amber), Junoon 40 (AOL)	✓ Pink & Spotted Bollworms, Whitefly, White Backed Planthoppers, Stem Borer, Leaf Folder, Brown Planthoppers, Hispa, Girdle Beetle, Leaf Miner, Epilachna Beetle ✓ >\0FGFXS4 ;O\NDFBL VG[RFJLG[BFGFZL >I/GF IGI\+6 DF8[P	350-500 ml/acre & 40-50 ml/pump	Contact and Stomach. Organophosphates group
Mixture Insecticides...				
95. Acephate 50% + Imidachloprid 1.8% SP	Lancer Gold (UPL), Stargold (Swal)	✓ R];LIF 5 SFZGL HLJFTGF V;ZSFZS IGI\+6 DF8[P		Mixture of Organophosphates and Neonicotinoids group insecticide
96. Chlorantraniliprole 9.3% + Lambda Cyhalothrin 4.6% ZC	Ampligo (Syngenta)	✓ Pink boll worm and army worm in cotton sSSf;DF\ HL\OJFGL >I/ sU;FAL >I/ VG[,xSZL >I/fGF IGI\+6 DF8[f ✓ Heliothis in chick pea s,F, R6FDF\ C\,LIMYL;GF IGI\+6 DF8[f	80-100 ml/acre, 8-10 ml/pump	Contact and translaminar action. Mixture of Anthralinic Diamides and Synthetic pyrethroid group insecticide
97. Chlorpyrifos 16% + Alphamethrin 1% EC	Anth Super (KR), Legend Plus (MIL), Chlorthrin (Devidayal), Pincer 115 (Sumil), Aflatoon (IIL), Alert (Tropical), Logan (SuperCSL), Zoro (Crystal), Twins (Sulphur Mills), Aaghaat (Bharat)	✓ Effectively controls wide range of sucking as well as chewing pest ✓ R];LIF 5 SFZGL HLJFT TYF >I/GF ;\I]ST IGI\+6 DF8[P	30-35 ml/pump	Contact & Stomach action. Mixture of Organophosphate and Synthetic pyrethroid group insecticide
98. Chlorpyrifos 21% + Fenobucarb (BPMC) 10.5% EC	Perfek 31.5 EC (BioStadt)	✓		Mixture of Organophosphate and Carbamates group insecticide
99. Chlorpyrifos 50% + Cypermethrin 5% EC	Double Star (Swal), Anth (KR), Sinergy (MIL), Combi King (KCS), Koranda 505 (TATA), Sac 505 (Shivalik), Hamla 550 (Gharda), Super Strong 505 (Sumil), Lethal Super 505 (IIL), Pradhan (Kilpest), Action 505 (Tropical), Nurocomb (Cheminova), Super 505 (SuperCSL), Catchh (Coromandel), Hilihunter (HIL), Lynch + Combi (PCCPL), Cannon (Nagarjuna), Balio (Atul), Ulka 505 (BioStadt), Cyklon (GSP), Panther (Amber), Nagraj 505 (CCIL)	✓ It effectively controls the lepidopteran insects in a wide range of crops. ✓ It is recommended for Aphids, Jassids, Thrips, White fly, American Bollworm, Spotted Bollworm, Pink Bollworm and Spodoptera litura of Cotton. ✓ R];LIF 5 SFZGL HLJFT TYF >I/GF ;\I]ST IGI\+6 DF8[P	350-400 ml/acre 35-40 ml/pump	It's a systemic and contact insecticide. It is one among the broad spectrum control insecticide. Mixture of Organophosphate and Synthetic pyrethroid group insecticide
100. Cypermethrin 3% + Quinalphos 20% EC	Viraat (UPL), Alert (Devidayal)	✓ Bollworms, Other Caterpillars, Fruit & Shoot Borers in cotton, vegetables	350-500 ml/acre	Contact & Stomach. Mixture of Synthetic pyrethroid group and Insecticide
101. Deltamethrin 0.27% + Buprofezin 5.65% EC	Devikey (Devidayal), Tusker (Crystal)	✓ For the control of mealy bug and sucking pest		Non-systemic, persistent insecticide and Flubendia with contact and stomach action; not translocated in the plant. Inhibits moulting of nymphs & larvae, leading to death. Also suppresses oviposition by adults; treated insect's lay sterile eggs.
102. Deltamethrin 1% + Triazophos 35% EC	Tiger (KR), Truzo Super (MIL), Tricada (Sumil), Combi DT (Devidayal), Shark (IIL), Shock (Kilpest), Tridelta (Tropical), Delfosse (Advance), Fusion (Sulphur Mills), Scoop (Willowood), Anaconda Plus (CCIL)	✓ >\0FGFXS4 R];LIF 5 SFZGL HLJFT TYF >I/GF ;RM8 IGI\+6 DF8[P	35-40 ml/pump	Contact & Stomach
103. Ethion 40% + Cypermethrin 5% EC	Nagata (TATA), Colfos (PI Ind.), Jashn (KR), Mitplus (Swal), Mit Plus (Swal), Cyperton (MIL), Eagle 405 (Devidayal), Rim Jhim (IIL), Sumite-405 (SuperCSL)	✓ Effectively controls wide range of pest's viz., Heliothis, spotted bollworm & pink bollworm in cotton. It is also effective against whiteflies on cotton and vegetables. ✓ IJJW 5 SFZGL >I/M4 Y\I% ;T[DH SYLZL4 ;O\NDFBLGF V;ZSFZS IGI\+6 DF8[P	350-400 ml/acre 35-40 ml/pump	Broad spectrum, contact & stomach action with acaridal effects
104. Imidachloprid 19.81% + Beta-cyfluthrin 8.49% OD	Solomon (Bayer)	✓ Aphid, jassids, shoot & fruit borer in brinjal and girdle beetle and semilooper of soybean		It has a combination of systemic and contact properties which gives quick knockdown and anti-feeding effects. It is thus a broad segment insecticide for sucking and biting pests.
105. Imidachloprid 40% + Ethiprole 40% WG	Glamore (Bayer)	✓ Brown plant hopper, white backed hopper in rice		It is a very good tool for hopper management thereby avoiding possibly of hopper burn in the later crop stages. The

				combination of two different modes of action makes it an excellent tool in resistant management programs.	
106. Imidachloprid 40% + Fipronil 40% WG	Lesenta (Bayer)	✓	White grubs in sugarcane	Good tool for the management of chronic problems of white grub.	
107. Flubendiamide 19.92% + Thiacloprid 19.92% SC	Belt Expert (Bayer)	✓	Thrips and fruit borer in chili	Muscular Dysfunction (FLB) and nervous system dysfunction (TCP) Flubendiamide acts as a Ryanodine Receptor disruptor of cellular calcium movement, important for muscle contractions. It causes lethargy, paralysis, rapid feeding cessation and death.	
108. Indoxacarb 14.5% + Acetamiprid 7.7% SC	Caesar (DuPont), Indoprid (Willowood)	✓			
109. Profenophos 40% + Cypermethrin 4% EC	Polytrin C (Syngenta), Kriphos Super (KR), Correct (MIL), Prosper-44 (Devidayal), Profeno King (KCS), Rokat (PI Ind.), Hitcel (Excel), Banjo Super (IIL), Maxcron Super (Vimax) Protrin (Sumil), Razor (Kilpest), Pataka (Tropical), Sumit 99 (SuperCSL), Kilron Plus (Crystal), Impact (Advance), Cypro (Sulphur Mills), Profex Super (Nagarjuna), Orax Super (Atul), Genesis (Willowood), Ajanta Super (Coromandel), Legend Super (CCIL)	✓	Bollworm of cotton Aphids, Jassids, Thrips, Whiteflies, Bollworm Complex, Hispa, Leaf Roller, Gall Midge, Stem Borer, Aphid, Pod Borer, Cutworm, Black Bug, Early Shoot & Stalk Borer, Pyrilla, White Fly, Root Grub, Grey Weevil, Shoot & Fruit Borer, Diamond Black Moth(DBM), Leafhopper, Black Citrus Aphid, Ground Beetle, Locust R];LIF 5 SFZGL HLI FT4 > QF TYF > /GF IGI\+6 DF8[P	400-600 ml/acre & 35-40 ml/pump	Broad spectrum, contact & stomach action
110. Thiamethoxam 1% + Chlorantranilprole 0.5% GR	Virtako (Syngenta)	✓	Stem borer and leaf curling worm in Paddy sSS5;DF\ > /GF IGI\+6 DF8[f	Systemic granule insecticide	
111. Thiamethoxam 12.6% + Lambda Cyhalothrin 9.5% ZC	Alika (Syngenta)	✓	For all sucking pest	15 ml/pump	Systemic insecticide
112. Thiamethoxam 17.5% + Chlorantranilprole 8.8% GR	Voliam Flexi (Syngenta)	✓			
FUNGICIDES / BACTERICIDES					
Technical	Brand Name		Application	Dose / Acre	Mode of Action
1. Azoxystrobin 23% SC	Amistar (Syngenta), Meerador (Adama), Azogro (Coromandel)	✓	Control on more than 400 type fungi	15 ml/pump	Systemic and preventive fungicide belong to Methoxy acrylate group
2. Benomyl 50% WP	Benofit (Coromandel), Kriben (KR), Cure (Tropical), Bentech (Advance)	✓	Soil borne diseases		
3. Captan 50% WP	Captan (KR), Captan (Devidayal), Captaf (TATA), Captra (Indofil), Kaptan (Tropical), Acme-cap (ACME)	✓	It is ideally suited to control diseases like Scab, Brown rot, Damping off, Downy Mildew, Fruit rot, Clump rot, various Leaf-spots including Tikka disease, Early and Late Blights and Dry root rot diseases effectively. It gives excellent protection against a wide variety of fungal infections in crops both at seeding stage and in mature plants.	3 gm/kg seed for seed treatment	Protective and curative action. It is an organic, broad-spectrum, contact fungicide. It therefore serves both as a seed-dresser and as a foliar spray to control seed-borne diseases , soil inhibiting fungi and foliar/fruit diseases. Heterocyclic nitrogen group
4. Carbendazim 25% EC	Ultra 25 EC (IIL)	✓			Benzimidazole group
5. Carbendazim 46.27% SC	Pearl (Sulphur Mills), Prosper 444 (Sumil), Nakshatra (PCCPL), Halloween (Canary), Wilzim SC (Willowood), Deepit (Amber)	✓	Powdery mildew of grapes and mango	20-25 ml/pump & 500 ml for soil drenching	Systemic and curative fungicide. Benzimidazole group
6. Carbendazim 50% WP	Bavistin (BASF), Kvistine (KR), Starbenz (Swal), Benguard (Dow), Milstin (MIL), Devistin (Devidayal), Camry 767 (Sumil), Vistine (Vimax), Benfil (Indofil), Dhanustin (Dhanuka), Crop Care (NACL), Sahara (IIL), Micfun (Kilpest), Tagstin (Tropical), Carzim-50 (Cheminova), Superstein (SuperCSL), Sten (Coromandel), Hilzim-50 (HIL), Adzim (Advance), Carben (Sulphur Mills), Tiara (PCCPL), Mintho (Atul), Bavistin 50DF (BioStadt), Wilzim (Willowood), Spider (Amber), Goldstin (CCIL), Falak (AOL), Acme-stin (ACME)	✓	O]JUL YTF ZMUMGF IGI\+6 DF8[P	30-35 gm/pump	Systemic , protective & curative action. Benzimidazole group
7. Chlorothalonil 75% WP	Kavach (Syngenta), Jatayu (Coromandel), K-Nil (KR), Ishaan 75 WP (TATA), Willonyl (Willowood), Pithoo (Amber), Dolphin (ACME)	✓	Recommended for Downy mildew, Anthracnose, Early blight, Late blight, Leaf spots, Damping off, etc. in Grapes, Potato, Chillies, Banana, Tomato, etc.	25-30 gm/pump	Contact fungicide. Chloronitriles group
8. Copper Hydroxide 77% WP	Kocide 101 (DuPont), Hi-Dice 77% WP (Dhanuka)	✓			Belongs to Inorganic group Copper based fungicide
9. Copper Oxchloride 50% WDG	Topgun DF (Sulphur Mills), Blueget 727 (Sumil), Acme-cop WDG (ACME)	✓	As per above	400 gm/acre	Contact- Protective Fungicide and anti-bactericide . Belongs to Inorganic group Copper based fungicide

10. Copper Oxychloride 50% WP	Blue Copper (Syngenta), Blitox (TATA), Trust (KR), Cuprina (PI Ind.), Devicopper (Devidayal), Copper-S (Safex), Trucop (Indofil), Dhanucop (Dhanuka), Crop Cap (NACL), Blue-Vit (Kilpest), Tagcop (Tropical), Su-Copper (SuperCSL), Blyton (Crystal), Hilcopper (HIL), Beltox 50 WP (Yesell), Copter (Canary), Riva & Gold Copper-50 (CCIL), Acmeop WP (ACME)	<ul style="list-style-type: none"> ✓ Used for the control Root rot diseases ✓ For anthracnose of grapes and mango ✓ It is a very effective Fungicide for the control of diseases on field, garden and plantation Crops. ✓ It is extensively used on blights of potato and tomato, fruit diseases, mildew of tobacco, vegetables, diseases of coffee, tea etc. 	500-700 gm/acre	Contact- Protective Fungicide and anti-bactericide. Belongs to Inorganic group Copper based fungicide
11. Difenconazole 25% EC	Score (Syngenta), Karara (KR), Debut (Indofil), Indream (BioStadt)	<ul style="list-style-type: none"> ✓ For the control of wilt of cumin 	10 ml/pump	Systemic fungicide. Preventive and curative action. Triazoles group
12. Difenconazole 3% FS	Dividend (Syngenta)	<ul style="list-style-type: none"> ✓ Use for the seed treatment 		
13. Dimethomorph 50% WP	Acrobat (BASF), Lurit (PI Ind.), Promcel (Excel), Talon (Tropical), Odin (Coromandel), Dimm (Sulphur Mills)	<ul style="list-style-type: none"> ✓ Fungi, Plasmopara, Phytophthora 		Cinnamic acid derivative group Fungicide
14. Dinocap 48% EC	Karathane (Dow)	<ul style="list-style-type: none"> ✓ 		Dinocap group
15. Dodine 6.5% WP	Noor (Indofil)	<ul style="list-style-type: none"> ✓ 		Guanidine group
16. Fenazaquin 10% EC	Magister (DuPont)	<ul style="list-style-type: none"> ✓ 		
17. Flusilazole 40% EC	Nustar (DuPont), Cursor (Dhanuka)	<ul style="list-style-type: none"> ✓ Powdery mildew 	100-400 ml/acre	Triazoles group
18. Fosefyl AL 80% WP	Aliette (Bayer)	<ul style="list-style-type: none"> ✓ Effective against Oomycetes fungi like downy mildew of grapes and damping off & Azhkal disease of cardamom 		Ethyl Phosphonate group
19. Hexaconazole 2% SC	Samarth 2SC (TATA)	<ul style="list-style-type: none"> ✓ For the control of Powdery mildew and Fruit rot in Chillies and Early blight and Late Blight in Potato 		Triazole group Fungicide. It controls the diseases in both preventive and curative action.
20. Hexaconazole 5% EC	Contaf (TATA), Hexostar (Swal), Hexzol (Excel), Conquer (UPL), Force (Devidayal), Total (Indofil), Ole Ole 601 (Sumil), Sitara (Indofil), Hexadhan (Dhanuka), Avone (ILL), Kiltaf (Kilpest), Hexacon (Tropical), Danzole (Cheminova), Super Hexa (SuperCSL), Corazole EC (Coromandel), Hilzole (HIL), Hexafine (Advance), Hexamax (Sulphur Mills), Xantho (Atul), Trigger (BioStadt), Glory EC (Canary), Alert (GSP), Acmezole EC (ACME)	<ul style="list-style-type: none"> ✓ Powdery Mildew, Scab, Rust, Blast, Sheath Blight in Rice, Tikka Leaf Spot, Major Diseases in Small Grain Cereals. Effectively Controls wide range of fungal Diseases. Protect the Crops for longer period. Highly effective against sheath blight of paddy, leafspots and blights on all types of crops and powdery mildew of Crops like grapes, chillies etc. ✓ NZ[S 5FSDF\ KFXLIF sWML/LIFvE]SLKFZFF IG\+6 DF8[P 	250-400 ml/acre 25-40 ml/pump	Bord Spectram Systemic, protective Action. Triazole group Fungicide
21. Hexaconazole 5% SC	Contaf Plus (TATA), Krizol 5 SC (KR), Hexostar Plus (Swal), Force Plus (Devidayal), Vintaf (Vimax), Hexzol Gold (Excel), Premier 999 (Sumil), Sitara Plus (Indofil), Avone Plus (ILL), Hexacon Super (Tropical), Danzole Plus (Cheminova), Super Hexa Plus (SuperCSL), Cryzol (Crystal), Corazol SC (Coromandel), Flomax (Sulphur Mills), Remo (PCCPL), Mass Pus (Nagarjuna), Xantho Premium (Atul), Trigger Pro (BioStadt), Glory SC (Canary), Harmony (Willowood), Alert Plus (GSP), Perfect (Amber), Hexcon (CCIL), Acmezole SC (ACME)	<ul style="list-style-type: none"> ✓ It has broad-spectrum action against ascomycetes, basidiomycetes and fungi imperfecti. It is ergosterol biosynthesis inhibitor thereby controlling growth and reproduction of plant fungal pathogens. It is useful for controlling Powdery mildews, rusts and leaf spots in cereals, oil seeds, horticultural and plantation crops and also for the effective control of Rice Sheath Blight. 	250-300 ml/acre 25-30 ml/pump	Systemic, protective & curative action. An excellent Triazole group Fungicide
22. Iprobenfos 48% EC	Tagkit (Tropical)	<ul style="list-style-type: none"> ✓ 		
23. Isoprothiolane 40% EC	Fujione (TATA), Blaster (ILL), Rhizo (Atul), Fezuki (Amber)	<ul style="list-style-type: none"> ✓ Recommended for control of Blast disease in Paddy. 		Nihon Nohyaku group
24. Kasugamycin 3% SL	Kasu-B (Dhanuka), Biomycin/Omycin (BioStadt)	<ul style="list-style-type: none"> ✓ For rice blast, dieback 	400-500 ml/acre	Anti-biotic
25. Kitazin 48% EC	Kitazin (PI Ind.)	<ul style="list-style-type: none"> ✓ 		Organophosphorus group
26. Kresoxim Methyl 44.3% SC	Ergon (TATA)	<ul style="list-style-type: none"> ✓ For the management of Grape Downy Mildew & Powdery mildew diseases. It is also known to provide quality yield benefits apart from providing protection from different diseases in crop like Paddy. 	150 ml/acre 15 ml/pump	Noval strobilurin Fungicides developed indigenously. Oximino acetates group
27. Mancozeb 35% SC	Hydroman (Sulphur Mills), Viva (Sumil), Eurofil NT – 35 SC (Indofil), Acmezeb 35 (ACME)	<ul style="list-style-type: none"> ✓ Early and late blight of potato 	75-100 ml/pump	Non-systemic & Contact fungicide. Belongs from Dithiocarbamate group.
28. Mancozeb 75% WP	Dithane M-45 (Dow), Indofil M-45 (Indofil) & Manfil 75 WG (Indofil), Tata M-45 (TATA), Rasayan M-45 (KR), Stargem-45 (Swal), Uthane M-45 (UPL), Devidayal M-45 (Devidayal), Pluto M-45 (Sumil), Marlett (Coromandel), Crythane M-45 (Vimax), M-Guard 45 (Gharda), King Zeb 45 (KCS), Dhanuka M-45 (Dhanuka), Crop Man (NACL), Leo M-45 (ILL), Kilpest M-45 (Kilpest), Zinthane M-45 (Tropical), Super M-45 (SuperCSL), Crystal M-45 (Crystal), Hillthane M-45 (HIL), Ad-45 (Advance), Hyzeb M-45 (HCL), Veera (PCCPL), Sparsh (BioStadt), Emthane (Sabero), Mover	<ul style="list-style-type: none"> ✓ Brown rust & black rust of wheat, Leaf blight & downy mildew of maize, Blast of paddy, Leaf spot of jowar, Early blight & late blight of potato, Late blight, buck eye rot & leaf spot of tomato, Damping off, fruit rot, ripe rot and leaf spot of chillies, Leaf blight of onion, Leaf spot of tapioca, Yellow disease of ginger, Leaf spot of sugar beet, Collar rot of cauliflower, Tikka, leaf spot & rust of groundnut, Rust of soybean, Leaf spot of black gram, Scab, sooty blotch, black rot & fly speck of apple, Angular leaf spot, downy mildew & anthracnose of grapes, Fruit rot of guava, Cigar end rot, tip rot, sigatoka leaf spot of banana, Anthracnose of watermelon 	400-600 gm 40-60 gm/pump	Non-systemic, contact with protective action, acts by disrupting lipid metabolism. Belongs from Dithiocarbamate group.

	(Canary), Mentor (Amber), Acmezeb (ACME), Dr. M-45 (AOL), Manikya M-45 (Vizien), Gold M-45 (CCIL)	✓ Used for seed treatment in groundnut for the control of collar rot & leaf spot		
29. Mandipropamid 23.4% SC	Revus (Syngenta)	✓ Downy mildew of Grapes ✓ Late blight of Potato & Tomato	120 ml/acre 12 ml/pump	Contact fungicide with strong fungicidal activity against foliar Oomycetes pathogens. It has unique translaminar action which helps longer duration of control
30. Metalaxyl 35% WS	Glazer (TATA), Krilaxyl 35 (KR), Metalaxyl (MIL), Krilaxyl (KR), Rampart (UPL), Galaxy (Devidayal), Himil Plus (ILL), Tagron (Tropical), Matrix (Advance), Mask (HCL), Pcmetal (PCCPL), Metal (GSP), Acmevyl (ACME)	✓ It is used for protection from pre and post emergent seedling blights and fungal seed rots in Maize, Bajra, Sorghum & Sunflower. ✓ Downy Mildew in Bajra & Maize ✓ ALIFZ6G[58 VF5L ALHGL V\]Z6 XIST JWFZJF DF8[P	3-6 gm/kg seed for seed treatment & 15 gm/pump	Systemic , protective & curative action. Belongs from Phenylamides (Acylalanine) group
31. Metiram 70% WG	Pack Up (KR), Tagventure (Tropical),	✓		Belongs from Dithiocarbamate group .
32. Myclobutanil 10% WP	Fit (KR), Systhane (Dow), Boon (Indofil), Mybil (Sumil), Index (Nagarjuna), Cygnet (BioStadt)	✓	15-20 gm/pump	Triazole group Fungicide
33. Pencycuron 22.9% SC	Monceren (Bayer)	✓ Sheath blight of rice ✓ Tuber treatment of potato for control of black scurf.	1 lit./60 bag tuber treatment	Non-systemic, Contact fungicide. Phenylureas group Fungicide
34. Propiconazole 25% EC	Tilt (Syngenta), Win (KR), Tide (MIL), Propi (Devidayal), Picon 250 (Sumil), Dhan (Indofil), Zerex (Dhanuka), Sona (ILL), Tagzol (Tropical), Super Propi (SuperCSL), Built (Crystal), Propicon (Coromandel), Propik (Sulphur Mills), Result (Nagarjuna), Albu (Atul), Cosmos (Canary), Phylum (Willowood), Final (GSP), Joel (Amber)	✓	80-100 ml/acre & 8-10 ml/pump	Systemic foliar fungicide with protective and curative action, with translocation acropetally in the xylem. Triazoles group
35. Propineb 70% WP	Antracol (Bayer), Scale (KR), Devitrac (Devidayal), Aaroosh (Coromandel), Enviro (Amber)	✓ Scab of Apple, Early & Late Blight of potato, Dieback of chili, Buck eye rot of tomato, Downy mildew of grapes, Leaf & fruit spots of pomegranate, Brown leaf spot and Narrow leaf leaf spot of rice.	400 gm/acre 40 gm/pmp	Multi-site contact activity. Belongs from Dithiocarbamate group .
36. Pyraclostrobin 20% WG	Headline WG (BASF)	✓		Methoxy Carbamates group Fungicide
37. Sulphur 40% SC	Share (Indofil), Grofit (Crystal), Kudrat Plus (Amber)	✓		Contact action. Inorganic group
38. Sulphur 55.16% SC	Magic (Devidayal), Flosul 800 (Sumil), Nansulf (PCCPL)	✓ To control of Powdery mildew, Red mite and Sulphur deficiency	800-2000 ml	Contact action. Inorganic group
39. Sulphur 80% WDG	Cosavet DF (Sulphur Mills), Cosamil DF (Sumil), Prahar (Kilpest), Nanthion DF (PCCPL), Su-Sulphur (SuperCSL), Villo (Atul), Innovet & Wokovit (BioStadt), Sulphur (Canary), Wilsulf (Willowood), Kudrat (Amber), Solar DF (CCIL), Acmesulf WDG (ACME)	✓ Used to control powdery mildew of apple, grapes, cow pea, moong, urid, pea, chillies, okra, mango and citrus; tikka leaf spot of ground nut and rust of pea crop. ✓ Diseases of Apple Scab, Rust, Brown Rot, Mites, Leaf Spot & Insects like Flea hoppers		Non-systemic & Contact action. Acts as a fungicide, acaricide give nutrition to plant. Inorganic group
40. Sulphur 80% WP	Thionutri (Syngenta), Wattasul (Sulphur Mills), Starsulf (Swal), Milvet (MIL), Sulfex (Excel), Sulfavit (Devidayal), Cropex (Vimax), Sulfil (Indofil), Sulfin Plus (ILL), Tagsul (Tropical), Sulfon (Advance), Insulf (UPL), Devisulphur (Devidayal), Sulfat (TATA), Prahar (Kilpest), Kingsulf (KCS), Acmesulf WP (ACME)	✓ Used to control powdery mildew of apple, grapes, cow pea, moong, urid, pea, chillies, okra, mango and citrus; tikka leaf spot of ground nut and rust of pea crop. ✓ Diseases of Apple Scab, Rust, Brown Rot, Mites, Leaf Spot & Insects like Flea hoppers		Non-systemic & Contact action. Acts as a fungicide, acaricide give nutrition to plant. Inorganic group
41. Sulphur 85% DP	Five Star (PCCPL), Gold (Devidayal), Five Diamonds (Sumil), Super Five Star (SuperCSL), Five Roses (Sulphur Mills)	✓		speed up the chlorophyll and amino acid formation, improves the soil pH
42. Sulphur 90% WDG	Cosavet Fertis (Sulphur Mills), Cosamil Gold (Sumil), Feddit-WG (CCIL)	✓		Inorganic group
43. Tebuconazole 2% DS	Raxil (Bayer), Dixxy (Amber)	✓ Loose smut and flag smut of wheat, collar rot, root rot and stem rot of groundnut		Triazole group Fungicide, systemic. Seed dressing fungicide which controls seed borne diseases in wheat and groundnut.
44. Tebuconazole 5.36% FS	Raxil Easy (Bayer)	✓ Used as seed treatment for the control of loose smut disease of wheat		Triazole group Fungicide, systemic
45. Tebuconazole 25.9% EC	Folicur (Bayer), Kure (KR), Triblast (Excel), Devikure (Devidayal), Dixcure (Amber)	✓ Blast and sheath blast of rice, powdery mildew and fruit rot of chili, tikka and rust of g'nut, purple blotch of onion, anthracnose (pod blight) of soybean		Systemic, protective, curative & eradicant action. Rapidly absorbed into the vegetative parts of the plant, with translocation principally acropetally. Triazole group Fungicide
46. Tetraconazole 3.8% EW	Domark (Isagro Asia)	✓		Triazole group Fungicide
47. Thifluzamide 24% SC	Pulsor (ILL)	✓		

48. Thiophanate Methyl 70% WP	Thiovit (Syngenta), Roko & Intop (BioStadt), Key (KR), Miltop (MIL), Devilock (Devidayal), Fungo (Safex), Brando 747 – 75% WP (Sumil), Prism (ILL), Tagsin-M (Tropical), Hexastop (Coromandel), Control (Sulphur Mills), Tamboora (Canary), Theme (Willowood), Acmetop (ACME)	✓ O]UYL YTF ZMUMGF IGI\+6 DF8[P	20-30 gm/pump	Systemic, protective & curative action. Absorbed by the leaves and roots. Thiophanates group
49. Thiram 75% DS	Devithiram (Devidayal), Tagthiram (Tropical), Super Thiram (SuperCSL)	✓ Seed treatment	3 gm/kg seed	Preventive activity and a broad spectrum of action. Dithiocarbamate group
50. Triadimefon 25% WP	Krileton (KR), Tagton (Tropical), Triguard (Advance)	✓		Triazoles group
51. Tricyclazole 75% WP	Gain (Syngenta), Beam (Dow), Tric (KR), Tristar (Swal), Profit (MIL), Logik (PI Ind.), Samar (UPL), Mantis (TATA), Triole 737 (Sumil), Baan & Baan Gold 75WG (Indofil), Dhan Team (Dhanuka), Force 11 (ILL), Blast (Kilpest), Tagteem (Tropical), Blast Off (Cheminova), Suzole (SuperCSL), Trizole (Crystal), Agni (Coromandel), Hilblast (HIL), Blaster (Sulphur Mills), Yodha (PCCPL), Sivic (Nagarjuna), Oryzae (Atul), Blastin (BioStadt), Lallari (Canary), Wiltry (Willowood), Stanza (GSP), Lakshay (Amber), Acmetric (ACME)	✓ Rice Blast Disease. Inhibition of melanin biosynthesis ✓ Effectively controls paddy both leaf blast & neck blast disease in all stages.	120-160 gm/acre, 12-16 gm/pump	Systemic fungicide. It belongs to SBI-other Azole groups. Triazoles group
52. Validamycin 3% SL	Valida (Sumitomo), V3 (KR), Verito (Sumil), Sheathmar (Dhanuka), Tagmar 20-20 (Tropical), Pollen (Atul), Falak (Amber), Valine (CCIL)	✓ Anti-biotic and anti-fungal ✓ E]SLKFZM4 VFUMTZM ;]SFZM4 ;LY a,F>84 SF/F RF9FGM ZMU4 U,T VF\HLIM VF AWF ZMUMGF V;ZSFZS IGI\+6 DF8[P	35-40 ml/pump	Anti-biotic and anti-fungal, Systemic bactericide and fungicide
53. Zineb 75% WP	Indofil Z-78 (Indofil)	✓	400 gm/acre 40 gm/pump	Dithiocarbamate group
54. Ziram 27% SC	Cuman L (Syngenta), Crop Ziram 27% EC (NACL), Star 27 (CCIL), Zoom Acme (ACME)	✓	400 ml/acre 40 ml/pump	Dithiocarbamate group
55. Ziram 80% WP	Crop Ziram 80% WP (NACL)	✓		Dithiocarbamate group
Mixture Fungicides/Bactericides....				
56. 2-Bromo 2-Nitro Propane-1, 3-Diol	Bactrinashak (Indofil), Serobact (Swal), Bactrimil (ILL), Bionol 100 (Tropical), Bactrinash (K.S.Agrochemicals), X-tra (Sulphur Mills), Bactinol (Bharat)	✓ Anti-bacterial or anti-biotic, Immunomodulator		Anti-bacterial
57. Azoxystrobin 11% + Tebuconazole 18.30% SC	Custodia (Adama)	✓ Suspensible concentrate fungicide for effective control of fruit rot, die-back and powdery mildew in chili crop		Suspensible concentrate fungicide. Mixture of Methoxy acrylate and Triazole group
58. Azoxystrobin 18.2% + Difenconazole 11.4% SC	Amistar Top (Syngenta)	✓ Sheath blight, dirty panicle, O]UhgI 56" 0F3 in rice ✓ NCL wilt, downy mildew and rust in maize ✓ Yello rust, powdery mildew in wheat	200 ml/acre	Systemic fungicide. Mixture of Methoxy acrylate and Triazole group fungicide
59. Captan 70% + Hexaconazole 5% WP	Taqat (TATA), Kick (KR), Super Suraksha (SuperCSL), Arjan (Amber), Power (CCIL)	✓ Controls most of the diseases in most of the crops like fruits, vegetables & cotton crops. ✓ RZDL4 E]SLKFZM4 ;]SFZM4 VFUMTZMv5FKMTZM ;]SFZM4 SF,J6"4 U[~4 8LSSF4 O/GMvS\NGM ;0M4 VF UJW ZMUMGF ,F\AF ;DI ;]WL IGI\+6 DF8[P	25 gm/pump	Contact and systemic Fungicide. Mixture of Heterocyclic nitrogen (Phthalimide) and Triazoles group fungicide
60. Carbendazim 12% + Mancozeb 63% WP	Saaf (UPL), Sixer (Dhanuka), CM-75 (KR), Turf (Swal), Team (MIL), Maczim (Devidayal), KingSaft (KCS), Maxclean (Vimax), Companion (Indofil), Care (ILL), Pearl (Kilpest), Revive 750 (Tropical), Super Safe (SuperCSL), Sure (Crystal), Kapeni (Coromandel), Fasto (Advance), Top Too (HCL), Saan (GKR), Dasma (PCCPL), Combi Pus (Nagarjuna), Riper (Atul), Bendaco (BioStadt), Carman (Canary), Carmel (Willowood), Amrit (Amber), Performer (ACME)	✓ KM0G[O]UHgi ZMUYL ARFJF DF8[T[DH T[GF IGI\+6 DF8[P	300-400 ml/acre & 40-50 gm/pump	Broad spectrum, contact & systemic action with protective & curative action. Mixture of Benzimidazole and Dithiocarbamate group fungicide
61. Carboxin 17.5% + Thiram 17.5% WP	Vitavax Ultra FF (Dhanuka)	✓		Mixture of Oxathin Carboxamides and Dithiocarbamate group fungicide
62. Carboxin 37.5% + Thiram 37.5% WP	Vitavax Power (Dhanuka)	✓ To control of seed & soil borne diseases, It protects the seed & emerging seedlings from seed & early seed borne diseases such as bunt, loose smut, covered smut, collar & charcoal rot, seedling diseases & blight in most crops.	2 to 3 gm/kg for seed treatment	Systemic & contact action. Mixture of Oxathin Carboxamides and Dithiocarbamate group fungicide
63. Cymoxanil 8% + Mancozeb 64% WP	Curzate (DuPont), Maximate (Indofil), Quarate Gold (Dhanuka), Crizol (Tropical), Partner (Crystal), Layby (Willowood)	✓ It is a Specialist Downy Mildew fungicide for Grape. ✓ It is used in three stages i.e. Ponga stage, 7-10 Leaf stage & Berry setting stage	30 ml/pump 300 ml/acre	Mixture of Acetamides and Dithiocarbamate group
64. Dimethomorph 0.00% + Ametoctradin 0.00% SC	Blend SC (TATA)	✓ Specially for downy mildew of grape	2 ml / lit.	Mixture of Cinnamic acid derivative and group fungicide

65. Fosetyl AL 66.67% + Fluopicolide 4.44% WG	Profiler (Bayer)	✓ Downy mildew of grapes		
66. Mancozeb 12% + Carbendazim 63% WP	Incom (BioStadt)	✓		Mixture of Dithiocarbamate and Benzimidazole group fungicide
67. Mancozeb 50% + Fenamidone 10% WG	Sectin (Bayer)	✓ Late blight of potato, powdery mildew of grape, downy mildew of cucumber		Contact and systemic action. Protective and curative fungicide
68. Mancozeb 62% + Tricyclazole 18% WP	Merger (Indofil)	✓	40-50 gm/pump	Mixture of Phenylamides and Triazoles group fungicide
69. Metalaxyl 8% + Mancozeb 64% WP	Krilaxyl 72 (KR), Radostar (Swal), Milmet (MIL), Unilax (UPL), Duet (Devidayal), Master (TATA), Matco 8-64 (Indofil), Manax 720 (Sumil), Crop Metaman (NACL), Himil (IIL), Ajomil (Kilpest), Tagmil (Tropical), Su-Meet-864 (SuperCSL), Mixol-72 (Crystal), Bullet (Advance), Gem (HCL), Metalman (Sulphur Mills), Duet (PCCPL), Sanchar (BioStadt), Metazeb (Willowood), Metal Plus (GSP), Ridox (CCIL), Acmil (ACME)	✓ Effective against downy mildew of grapes and other Crops. It is also used to control late blight of potato and tomato, blotch of onion, damping off in tobacco, cardamom etc. ✓ OJUYL YTF W~JFOLIFGF SMCJFZFGF IGI\+6 DF8[4 T[DH VFUMTZF TYF 5FKMTZF];SFZF GF ;RM8 IGI\+6 DF8[P	300-500 gm/acre & 35-40 gm/pump	Contact & systemic, curative & protective action. Mixture of Phenylamides (Acylalanine) and Dithiocarbamate group fungicide
70. Metalaxyl-M (Mefenoxam) 4% + Mancozeb 64% WP	Ridomil Gold (Syngenta)	✓ Effective against downy mildew of grapes and other Crops. It is also used to control late blight of potato and tomato, blotch of onion, damping off in tobacco, cardamom etc.	300-400 gm/acre & 30-40 gm/pump	Contact & systemic, curative & protective action. Mixture of Phenylamides (Acylalanine) and Dithiocarbamate group fungicide
71. Metalaxyl-M 3.3% + Chlorothalonil 33.1% SC	Folio Gold (Syngenta)	✓ Used primarily against diseases caused by oomycete fungi, such as downy mildews and late blights	400 ml/acre 40 ml/pump	Combination of Systemic and contact fungicide, curative & protective action. Mixture of Phenylamides and Chloronitrioles group fungicide
72. Metiram 55% + Pyraclostrobin 5% WG	Cabrio Top 44+5 (BASF), Flick (KR), Piccor 60 WG (Dow), Clutch 55+5 WP (PI Ind.), Mantaram 55+5 WP (Tropical), Colastro 55+5 WP (Coromandel), Balram Plus (Bharat)	✓];SFZM4 U~4 5FGGF\ 85SF\GM ZMU4 VFUMTZM];SFZM4 5FKMTZM];SFZM4 SF,J6"4 T/1FFZM H[JF 36F AWF ZMUM 5Z V;ZSFZS IGI\+6 SZ[K[P	35-40 gm/pump	Mixture of Dithiocarbamate and Methoxy Carbamates group fungicide
73. Propiconazole 13.9% + Difenconazole 13.9% EC	Taspa (Syngenta), Vespa (GSP)	✓ Sheath blight and leaf spot in rice sOF\UZDF\ XLY a,F>8 VG[5FGGF\ 85SF\GF IGI\+6 DF8[f	200 ml/acre	Contact and systemic fungicide. Mixture of two Triazole groups fungicide
74. Propineb 61.25 + Iprovalicarb 5.5% WP	Melody Duo (Bayer)	✓ Late blight of potato and downy mildew of grape ✓ Provides excellent control of broad range of fungal species from Oomycetes class (e.g. plasmospora viticola, phytophthora spp., psedoperonospora spp., peronospora spp.) with high plant compatibility.		Mixture of Dithiocarbamate and group fungicide
75. Pyraclostrobin 13.3% + Epoxyconazole 5% SE	Opera (BASF)	✓ Very effective fungicide for the control of Tikka disease in groundnut		Mixture of Methoxy Carbamates and Triazoles group fungicide
76. Streptomycin Sulphate 9% + Tetracycline Hydrochloride 1% SP (Streptocycline 9:1 SP)	Krosin AG (KR), Devicyclin (Devidayal), Streptomil (IIL), Kiltomycin (Kilpest), Tagmycin (Tropical), Crystocycline (Crystal)	✓ Recommended for the effective control of bacterial diseases of plants	30 gm/acre & 2 ml/pump	Anti-bacterial or Antibiotic
77. Tebuconazole 50% + Trifloxystrobin 25% WG	Nativo (Bayer)	✓ Foliar spray for the control of sheath blight, leaf blast and neck blast and glumes discoloration (dirty panicle) disease on rice, early blight, powdery mildew and anthracnose of tomato, yellow rust, powdery mildew of wheat.		Mixture of Triazoles and Oximino acetates group fungicide
78. Thiophanate Methyl 45% + Pyraclostrobin 5% FS	Xelora (BASF)	✓ Very effective fungicide used as seed treatment for the control of post emergent damping off (<i>Rhizoctonia Spp.</i>) disease in okra.		Mixture of Thiophanate and Strobilurin group fungicide
79. Zineb 68% + Hexaconazole 4% WP	Avtar (Indofil), Supermite (BioStadt)	✓ Sheath blight, Brown spot, Blast in rice	1000-1250 gm/ha	Mixture of and Triazoles group fungicide
INSECTICIDE + FUNGICIDE Mixture				
TECHNICAL	Brand Name	Application	Dose / Acre	Mode of Action
1. Flubendiamide 3.5% + Hexaconazole 5% WDG	Origin (TATA)	✓ It is one sure shot solution to both leaf folder and sheath blight in Paddy . and has phytonic effect, resulting in higher yields		Novel combination of first ever Insecticide + Fungicide combination launched in India. It offers an assured control with the two most proven molecules. It is a both systemic and contact molecule
HERBICIDES / WEEDICIDES				
TECHNICAL	Brand Name	Application	Dose / Acre	Mode of Action

1.	2,4-D Amine Salt 58% WSC & SL	Kay-m (KR), Safaya 720 (Devidayal), Aura 58 SL (MIL), Weedcel Super (Excel), Twister (ILL), Eraser (Kilpest), Weedmar Super (Dhanuka), Weedor (Crystal), Zura (Atul), Capture (Canary), Willomine (Willowood)	<ul style="list-style-type: none"> ✓ Annual Mustard, Thistle, Dandelion, Control Aquatic Weed in Lakes & Ponds, Ragweed, Lambsquarters ✓ Apart from effectively control broad leaf weeds. These also control the Cyperus sp. ✓ There is no adverse effect on crops with recommended dose. ✓ Cyperus, Tribulus (Gokhru), Trianthema celosia, Euphorbia (Badi Doodhi), Phyllanthus in sorghum 	150-200 ml/pump	Selective and Systemic herbicide of Phenoxyacetic group. Salts are readily absorbed by the roots, whilst esters are readily absorbed by foliage. Acts as a growth inhibitor.
2.	2,4-D Ethyl Ester 38% EC	Hit-44 (ILL), Kilweed 38 E (Kilpest), Weedmar (Dhanuka), Kilharb 38 (Tropical), Weed Killer (SuperCSL), Cut-Out (Crystal), Rugo (Atul), Fighter 38 (CCIL), Kissan 38 (AOL)	✓		
3.	2,4-D Ethyl Ester 20% WP	Electron 200 (Devidayal), Zura 22.5 SL (Atul)	✓		Selective, systemic, hormone-type herbicide, absorbed by the foliage, with translocation
4.	2,4-D Sodium Salt 80% WP	Fermoxone (Syngenta) , Kay-D (KR), Weedstar (Swal), Safaya 80 (Devidayal), Dcel (Excel), Superhit (ILL), Kilharb (Tropical), Salix (Atul), Fighter 80 (CCIL), Kissan 80 (AOL)	✓	Annual Mustard, Thistle, Dandelion, Control Aquatic Weed in Lakes & Ponds, Ragweed, Lambs quarters	Action like indole acetic acid (synthetic auxins)
5.	Anilophos 30% EC	Army (ILL)	✓		
6.	Atrazine 50% WP	Milzine 50 (MIL) , Atrataf (TATA) , Rasayanzine (KR) , Attrastar (Swal), Attack (Devidayal), Solaro (PI Ind.), Atracel (Excel), Attack (Devidayal), Sumat (Sumil), Zinguard (Gharda), Traxx (Shivalik), Atrafil (Indofil), Dhanuzine (Dhanuka), Strike (ILL), Chapet (Kilpest), Tagtaf (Tropical), Srizon (Crystal), Atrafine (Advance), Atrasul (Sulphur Mills), Citra (PCCPL), Dhwanish (BioStadt), Polar (Canary), Atro (Amber), Atragold (CCIL), Umbra 50 (AOL)	✓	Used for the control of annual grasses and broad leaved Weeds in Maize, Sugarcane, Sorghum, Coffee, Grape Vine, Oil Palm, Banana, Pineapple and Guava. It is used in non-crop areas as a total weed killer against annual perennial weeds.	It is a Translocated Pre-emergence Herbicide . Selective triazine herbicide. It belongs to the Triazine class.
7.	Azimsulfuron 50% DF	Segment (DuPont)	✓		
8.	Bispyribac Sodium 10% SC	Macho (Syngenta) , Adora (Bayer) , Nominee Gold (PI Ind.)	✓	For control of weeds in Rice crop viz., <i>Echinochloa crusgali</i> , <i>E. colonum</i> , <i>Ischaemum rugosum</i> , <i>Cyperus difformis</i> , <i>C. iria</i> , <i>Fimbristylis miliacea</i> , <i>Eclipta alba</i> , <i>Ludwigia parviflora</i> , <i>Monochoria</i> , <i>Vaglanis</i> , <i>Alternthra</i> , <i>Phloxeroides</i> , <i>Sphinochloa zeylanica</i>	New generation broad spectrum post emergent herbicide, selective and systemic. It gets foliage and roots
9.	Butachlor 50% EC/EW	Rasayanchlor (KR), Milchlor 50EC, Milfast 50EW (ILL), Baaz 50E (Kilpest), Thunder (Tropical), Supchlor (SuperCSL), Bumper (Crystal), Hiltaklor (HIL), Kikout (Sulphur Mills), Irio (Atul), Hal Mix (Amber), Chemchlor (CCIL), Demand 50 (AOL)	✓		
10.	Butachlor 5% GR	Milchlor 5G (ILL), Baaz 5G (Kilpest), Thunder 5G (Tropical)	✓		
11.	Carfentrazone Ethyl 40% DF	Nabood (Dhanuka)	✓		
12.	Chlorimuron Ethyl 25% WG	Kloben (DuPont) , Qurin (Dhanuka), Trick 25 WP (ILL), Cyno (Atul)	✓		
13.	Clodinafop Propargyl 15% WP (Piroxofop-propargyl)	Topik (Syngenta) , Lucifer (Bayer), Chopper (DuPont), Topik (KR), Tople (Swal), Milwin (MIL), Vidhvansh (Excel), Jhatka (UPL), Deviclod (Devidayal), Viola 150 (Sumil), Dynofop (Dhanuka), Omega (ILL), Dion (Tropical), Rakshak Plus (Cheminova), Avtaar (Crystal), Skipper (Coromandel), Hilpik (HIL), Razor (Advance), Action (Sulphur Mills), Ohm (PCCPL), Point (Nagarjuna), Vitis (Atul), Maachis (BioStadt), Wilfop (Willowood), Compact (Amber), Fargo (AOL)	✓	Recommended for its use to control Phalaris minor and most of the important grass weeds in wheat . It is applied when majority of Phalaris is emerged and actively growing.	Selective, Post-emergence. It works effectively even when the climate is foggy or cloudy. It also doesn't get washed away if it rains.
14.	Cyhalofop Butyl 10% EC	Clincher (Dow)	✓		
15.	Diuron 80% WP	Daron (Tropical)	✓		
16.	Ethoxysulfuron 15% WDG	Sunrice (Bayer)	✓	Very effective for the control of sedges and broadleaf weeds in transplanted Rice	Post-emergent broad spectrum herbicide
17.	Fenoxaprop-P- Ethyl 6.7% EC	Ricestar (Bayer)	✓	Recommended for the control of grassy weeds, especially <i>Echinochloa Spp.</i> In direct seeded and transplanted Rice .	Selective, Post-emergence herbicide
18.	Fenoxaprop-P- Ethyl 9.3% EC	Whipsuper (Bayer) , Naaka Super (KR), Devislash (Devidayal), Wego Super (ILL), Melina (Atul), Finoxa (Amber)	✓	It having action against <i>Echinochloa Spp.</i> & other grassy weeds in Soybean, Rice, Cotton, Black Gram & Onion	Selective, post-emergent broad spectrum herbicide with contact and systemic action. Absorbed principally by the leaves, with translocation both acropetally and basipetally to the roots or rhizomes
19.	Fluazifop-P-Butyl 13.4% EC	Fusilade Max (Syngenta)	✓	Total grasses in groundnut and tomato	

20. Glufosinate Ammonium 15% SL	Basta (Bayer)	✓ Recommended for the control of perennial weeds in plantations like tea .		Non-selective, post-emergent herbicide. It is very versatile and effective under different climatic conditions
21. Glyphosate 20% SL Ammonium Salt	Gambay (Excel)	✓ Annual/Perennial Weeds, Post-Harvest in Fallow Periods & Non-Crop Land , Broad Leaf, Woody Brush, Grassy Weeds		
22. Glyphosate 41% SL Iso-propyl-amine (IPA) Salt	Round Up (Monsanto) , Allkill (KR), Dryphosphate (Swal), Weedall (Dow), Glycel (Excel), Milsate (MIL), Sweep (UPL), PI Glypho (PI Ind.), Gladiator 41 (Devidayal), Glycare (Vimax), Glytaf (TATA), Khattam SL (Sumil), Clean Up (Indofil), Noweed (Dhanuka), Crop Glypho (NACL), Hijack (IIL), Glyphokil (Kilpest), Safal (Tropical), Glyphos (Cheminova), Superkill (SuperCSL), Clinton (Crystal), Glycor (Coromandel), Trinashi (HIL), Glymax (Advance), Glyyesell (Yesell), Vinash (Sulphur Mills), Veto (PCCPL), Coneo (Atul), Brake (BioStadt), Teetar (Canary), Willosate (Willowood), Darban (Amber), Lagaam (AOL)	✓ Annual/Perennial Weeds, Post-Harvest in Fallow Periods & Non-Crop Land , Broad Leaf, Woody Brush, Grassy Weeds. ✓ very effective against deep rooted and woody perennials, annual and biennial grasses, sedges and broad leaved weeds	800-1200 ml/acre 80-100 ml/pump	Non-Selective, Post-emergence. Glyphosate inhibits the EPSP synthesis enzyme, which leads to depletion of key amino acids that are necessary for protein synthesis and plant growth.
23. Glyphosate 5% SL Ammonium Salt	Take 5 (Excel)	✓ Annual/Perennial Weeds, Post-Harvest in Fallow Periods & Non-Crop Land , Broad Leaf, Woody Brush, Grassy Weeds		
24. Glyphosate 71% SG Ammonium Salt	Allkill 71 (KR), Star 71 (Swal), Mera 71 (Excel), Gladiator 71 (Devidayal), Milsate 71 (MIL), GlyGran (Sumil), Flite 71 (IIL), Dera (Dhanuka), Safal 71 (Tropical), Dakar (Cheminova), Superkill (SuperCSL), Topper-77 (Crystal), Killshot (Coromandel), Vinash Power (Sulphur Mills), Veto Plus (PCCPL), Coneo 71 (Atul), Brake-G (BioStadt), Willosate 71 (Willowood), Aandhi-71 (Bharat)	✓ Annual/Perennial Weeds, Post-Harvest in Fallow Periods & Non-Crop Land , Broad Leaf, Woody Brush, Grassy Weeds	1000-1200 gm/acre 100 gm/pump	To inhibit an enzyme involved in the synthesis of the amino acids tyrosine, tryptophan and phenylalanine. It is absorbed through foliage and translocated to growing points
25. Imazethapyr 10% SL	Solitude (Bayer) , Perfect (KR), Spur (Swal), Inro (PI Ind.), Sugam (Excel), Devisuit (Devidayal), Sumiza (Sumil), Seleccion (IIL), Tagpyr (Tropical), Dinamaz (Cheminova), Guard (Crystal), Fervent (Coromandel), Imasul (Sulphur Mills), Patriot (Willowood), Square Cut (Amber)	✓ For the control of broadleaved weeds and grasses in soybean and groundnut	250 gm/acre 8 pump/acre 30 gm/pump	Systemic broad spectrum herbicide, absorbed by the roots and foliage, with translocation in the xylem and phloem, and accumulation in the meristematic regions.
26. Isoproturon 75% WP	Isoguard (Gharda) , Milron (IIL), Comando 75WP (Kilpest), Wonder (Tropical), Hilproturon 50 & 75 WP (HIL), Achieve (CCIL), Avalanche 75 (AOL)	✓ For the control of weeds in wheat and isabgul		
27. Metribuzine 70% WP	Tata Metri (TATA) , Sencor (Bayer), Krizin (KR), Metrimil 70 (MIL), Metrex (Excel), Encore (Devidayal), Sumetri (Sumil), Barrier (Dhanuka), Anchor (IIL), Dezire (Tropical), Sricor (Crystal), Grometri (Coromandel), Metrite (Sulphur Mills), I-Max (Nagarjuna), Afford (Canary), Willord (Willowood), Verdict (GSP), Oyster (Amber), Raptor 70 (AOL)	✓ It is used as herbicide recommended for use in Wheat, Soybean, Potato, Tomato & Sugarcane for control of both Grasses & Broadleaves ✓ .A8FSF4 8FD[8F4 X[Z0L TYF 3p\DF\ 3F; TYF 5CM/F 5FGJF/F IG\NFD6 IG\+6 DF8[P		Selective & Systemic pre- and post-emergence broad spectrum herbicide, absorbed predominantly by the roots, but also by the leaves, with translocation acropetally in the xylem
28. Metsulfuron Methyl 20% WG / WP	Algrip WG (DuPont) , Metstar (Swal), MM-20 (MIL), Metsy (UPL), Hook 20 WG (Dhanuka), Weed Grip (IIL), Kill Grip (Kilpest), Tagrip (Tropical), Metcil M (Cheminova), Sulgrip (SuperCSL), Algo (Crystal), Mitsu (Advance), Siege (PCCPL), Convo (Atul), SMS (Willowood), Bilgrip (Bharat), Fuse (AOL)	✓ Broad Leaf Weeds in wheat ✓ Controlled weeds:- <i>Chenopodium album</i> (Lumbs quarters), <i>Melilotus indica</i> , <i>Melilotus alba</i> , <i>lathyrus aphaca</i> , <i>Anagallis Arvensis</i> (Pinpernal), <i>Vicia sativa</i> , <i>Rumex dentatus</i> , <i>Medicago denticulate</i> ✓ Spray after 76 days.	8 gm / acre	Selective, Systemic and Post-emergence
29. Oxadiargyl 6% EC	Raft (Bayer)	✓ Very effective for the control of grasses, sedges and some broad leaf weeds in transplanted Rice, Cumin and Mustard .		Selective, post-emergent herbicide
30. Oxadiargyl 80% WP	Topstar (Bayer)	✓ Very effective for control of grasses and sedges and some broadleaf weeds in Rice .		Broad spectrum herbicide
31. Oxyfluorfen 23.5% EC	Vinash (Advance) , Goal (Dow), Oxygold (Indofil) , Honcho (TATA), Kroll (KR), Oyster (Devidayal), Zargon (Dhanuka), Orbit (IIL), Tag Globe (Tropical), Ronaldo (Crystal), Waada (hpm), Ingold (BioStadt), Oxyguard (Willowood)	✓ Used to control of more than 60 toughest annual broadleaf and grassy weeds in vegetables, fruit, cotton, ornamentals, nut, vine, and field crops . ✓ Paddy: <i>Echinochloa Spp.</i> , <i>Cyperus Spp.</i> , <i>Eclipta alba</i> ; Tea: <i>Digitaria marginata</i> , <i>Imperata cylindrical</i> ; Onion: <i>Chenopodium album</i> , <i>Cyperus iria</i> and Groundnut: <i>Echinochloa album</i> , <i>Digitaria Spp.</i>	20 ml/pump for other crops & 5 ml/pump for Cumin, Ajwain	Selective, Broad spectrum pre- and post-emergent herbicide. It targets a specific enzyme Protoporphyrinogen oxidase in the chlorophyll biosynthetic pathway which leads to cell membrane integrity and plant death.
32. Paraquat Dichloride 24% SL	Gramoxone (Syngenta) , Kapiq (KR), Swat (Swal), Mil-P (Meghmani), Parachute (Devidayal), Swat (Swal), Uniquat (UPL), Para Guard (Gharda), Firestorm (Chemtura), Crezil (Vimax), Paralac (TATA), Ozone (Dhanuka), Milquat (IIL), Tagquit (Tropical), Super Pera (SuperCSL), Allquit (Crystal), Weedax (Coromandel), Spyker (Advance), Gramexell (Yesell), Parasac	✓ Annual and Perennial Weeds. Crops: Tea, Coffee, Rubber, orchards of fruit crop ✓ As a Pre-emergence herbicide in Cumin	750-1000 ml/acre & 75 ml/pump	Non-selective post emergence, contact herbicide. It inhibits photosynthesis. It contains 'Paraquat Dichloride'. Requires sunlight which activated the chemical, resulting in desiccation of green plant parts.

	(Shivalik), Kitkat (Oshnic), Rhino (Nagarjuna), Parq (BioStadt), Kataar (Canary), Wilquat (Willowood), Tejas (Amber), Gramex (CCIL)			
33. Pendimethaline 30% EC	Stomp (BASF), Tata Panida (TATA), Dhanutop (Dhanuka), Kri-Stop (KR), Swalpendi (Swal), Pendilin (MIL), Excel Plus (Excel), Bunker (PI Ind.), Depend (Devidayal), Spenta (Sumil), PendiClean (Vimax), Pendamil (ILL), Stump (Kilpest), Tagpendi (Tropical), Pendiherb (Cheminova), Super Penda (SuperCSL), Penadrill (Crystal), Eezykill (Coromandel), Pantac (Advance), Pendosh (Oshnic), Pendistar (HCL), Pendisul (Sulphur Mills), Klean Up (PCCPL), Xyris (Atul), Penda (IPL), Taipan (Canary), Octavia (Willowood), Pendi-fix (GSP), Rapid-X (Amber)	<ul style="list-style-type: none"> ✓ Effectively control wide variety of annual grasses and broad leaved weeds in variety of crops. Weeds on Farms, Turfs, Industrial Sites, Ground Maintenance ✓ For the control of Weeds in soybean, wheat, groundnut, cotton, mustard and a range of crops. It can destroy 51 types of annual grasses and broad leaved weeds. 	800-1000 ml/acre	Selective pre-emergence herbicide. Acts by inhibiting cell division and cell elongation and effected weeds die shortly after germination.
34. Pendimethaline 38.7% CS	Stomp Xtra (BASF), Pendi Rich (GSP), Panida Grande (TATA), Gardenclean (Dow)	<ul style="list-style-type: none"> ✓ Effectively control wide variety of annual grasses and broad leaved weeds in variety of crops. Weeds on Farms, Turfs, Industrial Sites, Ground Maintenance 	700 ml/acre	Selective pre-emergence herbicide. Acts by inhibiting cell division and cell elongation and effected weeds die shortly after germination.
35. Penoxsulam 240 SC	Granite (Dow)	✓		
36. Pinoxaden 5% EC	Axial 5.1 (Syngenta), Melsa (PI Ind.)	<ul style="list-style-type: none"> ✓ It controls phalaris which is a key weed of wheat crop 	350 ml/acre 35 ml/pump	Post emergence selective herbicide
37. Pretilachlor 50% EC	Rifit (Syngenta), Prince (KR), Pitla (Swal), Merit (Excel), Profit 100% (Devidayal), Etila (Vimax), Preet (TATA), Fabio (Sumil), Offset (Indofil), Craze (Dhanuka), Racer (ILL), Taghit (Tropical), Prettyherb (Cheminova), Super Cut (SuperCSL), Shift (Crystal), Pilot (Coromandel), Hilpreti (HIL), Boxster (Advance), Sureshot (Sulphur Mills), Klean Out (PCCPL), Eraze (Nagarjuna), Vinia (Atul), Rimove (BioStadt), Preila (Canary), Wilfit (Willowood), Ujja (Amber), Pretila (CCIL), Wrap 50 (AOL)	<ul style="list-style-type: none"> ✓ Recommended for control of grasses, sedges & broad leaved weeds like <i>Echinochloa spp.</i>, <i>Cyperus iria</i>, <i>Cyperus difformis</i>, <i>Fimbristylis milliacea</i>, <i>Ludwigia parviflora</i>, <i>Panicum repens</i> etc. in planted Rice. ✓ 0F\UZDF\ 3F; VG\ J[,FJF/F IG\NFD6 IG\+6 DF8[500 ml/acre	Inhibition of cell elongation, nucleic acid and protein synthesis.
38. Pretilachlor 37% EW	Rifit Plus (Syngenta), Ujja Super (Amber)	<ul style="list-style-type: none"> ✓ Grasses, sedges and some broad leaf weeds in Rice s0F\UZDF\ 3F;4 J[,FJF/F VG\ S[8,F\5 5CM/F 5F\NOFJF/F IG\NFD6GF IGI\+6 DF8[f 	600 ml/acre	IG\N6GF 5 FYIDS 5F\NOF\ 5Z IS IF SZ[K[4 SF\ TM V[\S]ZLT YJFDF IGQO/ HFI K[VYJF JF\S] J/[J]\ 5FG V\T[G]SXF 5FD[K[P
39. Propaquizafop 10% EC	Society (Indofil)	✓		
40. Pyrazosulfuron Ethyl 10% WP	Saathi (UPL)	<ul style="list-style-type: none"> ✓ Grassy and Broad Leaf Weeds in Paddy 	80 gm/acre	Selective, Pre-emergence
41. Pyrithiobac Sodium 10% EC	Rife (Cheminova), Nanchaku (BioStadt)	✓		
42. Pyroxopropinyl 15% WP	Sartaj (TATA)	✓		
43. Quizalofop-P-terfuryl 4.41% EC	Pantera (DuPont)	✓		
44. Quizalofop Ethyl 5% EC	Targa Super (Dhanuka), Hakama (ILL), King Super (Swastik)	<ul style="list-style-type: none"> ✓ All narrow leaf weeds <i>Echinochloa</i> (Sawak), <i>Eleusine</i> (Goose grass), Wild sorghum, <i>Cynodon</i> (doob grass), <i>Saccharum</i> (kans), Johnson grass, Large crab grass, Volunteer paddy, Jowar, Pearl millet, Maize, etc. in Soybean, Cotton, Groundnut, Green gram, Black gram, Sesamum, Jute and all other broad leaf crops and vegetables 	300-400 ml/acre 30-40 ml/pump	Selective, Post-emergence. It is very quickly absorbed by the weeds and translocated and kill the weeds. The affected weeds are unable to regenerate.
45. Sulfosulfuron 75% WG	Unik (Swal), Lalkar (Excel), SF-10 (UPL), Fateh (TATA), Furo 123 (Sumil), Sultop (Dhanuka), Kaiser / Guru (ILL), Tagstar (Tropical), Sumet (Cheminova), Super Sulfo (SuperCSL), Arrow (Sulphur Mills), Blanket (PCCPL), Loxo (Atul), Avast 10 (AOL)	<ul style="list-style-type: none"> ✓ Used for the effective control of <i>Phalaris Minor</i> in Wheat crop. It also controls broad-leaved weeds like <i>Chenopodium album</i>, <i>Mellilotus alba</i>. 	13.5 gm/acre	It is a selective early post-emergence Herbicide. It has dual action. It kills the plant by both entering the roots and leaf and thereby killing the weeds after discoloration.
46. Tembotrione 42% SC	Laudis (Bayer)	<ul style="list-style-type: none"> ✓ Recommended for use along with surfactant for control of broad leaf and grassy weeds in corn 		Broad spectrum, pre-emergent herbicide
Mixture Herbicides....				
47. Clodinafop Propargyl 15% WP + Metsulfuron Methyl 0.00%	Sandesh (Swal)	✓		
48. Fomesafen 11.1% + Fluazifop-p-butyl 11.1% SL	Fusiflex (Syngenta)	<ul style="list-style-type: none"> ✓ For control of broad and narrow both type of weeds in groundnut and soybean. 	400 ml/acre 40 ml/pump	Herbicide
49. Imazethapyr 35% + Imazamox 35% WG	Oddissey (BASF), Adue (Bayer), Bingo (PI Ind.), Jodi (BioStadt), Pyramox (Coromandel)	<ul style="list-style-type: none"> ✓ Control of grasses and broadleaves weeds in soybean and groundnut 		Selective and post-emergent herbicide

50. Metsulfuron Methyl 10% + Chlorimuron Ethyl 10% WP	Almix (DuPont), Pimix (PI Ind.), Cormix (Coromandel), Rymix (Atul)	✓ Broad Leaf Weeds in wheat	8 gm / acre	
51. Metsulfuron Methyl 3% + Iodosulfuron Methyl Sodium 0.6% WDG	Atlantis (Bayer)	✓ Very effective for control of grasses, sedges and broadleaf weeds in Wheat		Broad spectrum herbicide, novel safened sulfonyl urea based product for post-emergent application
52. Pretilachlor 6% + Bensulfuron Methyl 0.6% GR	Londax Power (DuPont), Eraze Strong (Nagarjuna)	✓		
53. Sulfosulfuron 75% + Metsulfuron Methyl 5% WG	Satasat (Swal), Total (UPL)	✓ Broad Leaf Weeds(including Rumes sp.), Grassy Weeds (Phalaris minor)	16 gm/acre	Selective, Post-emergence
54. Thiobencarb 40% + Propanil 20% EC	Satunil 600 EC (BioStadt)	✓		
55. Thiobencarb 60% + 2,4-D IBE 20% EC	Grassedge 800 EC (BioStadt)	✓		
PGR, PGP, Micro-Fertilizer, Bio-Fertilizer etc.				
Technical	Brand Name	Application	Dose / Acre	Mode of Action
1. Alpha Naphthyl Acetic Acid 4.5% SL	Planofix (Bayer), Acimone (Devidayal), Superfix (Indofil), Anmol (ILL), Frutofix (Kilpest)	✓ Used for the purpose of inducing flowering, preventing shedding of flower buds and unripe fruits. ✓ It helps in enlarging fruit size, increasing and improving the quality and yield of fruits.	75 ml / 200 lit. of water	Plant growth regulator with systemic properties. It penetrates into tissues and is translocated
2. Amino Acid	Isabion 62.5% (Syngenta), Fentac Plus (Coromandel), Fruit Energy 5% (Indofil), Aishwarya Granules (UPL), Devimino (Devidayal), Toyo (Vimax), Sumino (Sumil), Emerald (Sulphur Mills)	✓ Induce flowering and fruiting, Reduce flower and fruit drop, Improve fruit size, Quality and color ✓ Crops: Paddy, Groundnut, Sugarcane, Potato, Chilli, Onion, Fruits, Vegetables & Plantation Crops like Tea, Cardamom etc.	400 ml/acre 40 ml/pump	Amino acids enriched with plant growth substances and essential trace minerals.
3. <i>Ascophyllum nodosum</i> (Micro-fertilizer)	Biovita (PI Ind.), Agrofert (Sainath Agro-Vet)	✓		
4. Chlormequat Chloride 50% SL	Lihocin ((BASF), Layer (Willowood)	✓ PGR: Used to improve yield & quality of cotton, vegetables, cereals and fruits		
5. Cytokinin enzymes	Paushak Super (KR)	✓		
6. Ethephon 39% SL	Ethrael (Bayer), Kripon (KR), Ethephon / Deviphon (Devidayal), Tagpon 10 & Tagpon 39 (Tropical), Ethefol (Indofil), Bison (Canary), Arsh (Amber)	✓ It is versatile plant growth regulator which improves colouration and accelerates uniform ripening of fruits like pineapple, mango, tomato etc. It can be diploid in specific uses like defoliation in pomegranate and breaking alternate bearing in mango. NFODGF 5FG B[ZJF DF8[TYF O/ 5SJJF DF8[400 ml/acre 40 ml/pump	Plant growth regulator with systemic properties. Penetrates into the plant tissues, and is decomposed to ethylene, which affects the growth processes.
7. Gibbralic Acid Tech	Progibb (Sumitomo), JaiGibb (KR), Devigibb (Devidayal), Jibra (Sumil), Prime (ILL), Tag Gibb (Tropical), Cil-Gibb (Cheminova), Krigibb (KR), Crigibb (Crystal), Wilgib (Willowood)	✓ Acts as a plant growth regulator on account of its physiological and morphological effects in extremely low concentrations. Translocated. Generally affects only the plant parts above the soil surface	2 gm/acre 0.2 gm/pump	
8. Gibbralic Acid 0.001%	Hoshi (Sumitomo), Prime Gold (Pearl), Guru (IPL), Vird (Amber)	✓		
9. Non-ionic Surfactant	Sandovit (Syngenta), Devifix (Devidayal), Wilicon (Willowood), Silky (KR), Filwet (Indofil)	✓ Increase persistence & Penetration by reducing surface tension & volatilization. Protect wash-off against rain.		
10. Peclobutrazole 23% SC	Cultar (Syngenta), Paclor (IPL), Canstar (Canary)	✓	50 ml/acre 5 ml/pump	
11. Sea Weed Extract	Hilgrow (HIL), Kri-Kelp & Kri-Gold Super (KR)	✓		
12. Stigmasterol 0.1%+ Campasterol 0.05%	Brand & Brand GR (Willowood)	✓		
13. Sulphur 90% Bentonite Pestiles	DeviJwala (Devidayal)	✓ Speed up the chlorophyll and amino acid formation, improves the soil pH.		
14. Tricontanol 0.1% EW	Miracle (Cheminova), PC Boom (PCCPL), Flyover 0.1 EW (Willowood), Taru (Amber), Bilsan (Bharat)	✓		
15. Tricontanol 0.05% EC	Miraculan 0.05 EC (Dow), Contanol EC (IPL), Tonic GR (Amber), Agriculan (AOL)	✓		
16. Zinc Phosphide 80% WP	Ratfree (Swal), Ratol (UPL), Rattle (Devidayal), Ratkil (BioStadt)	✓ Rat, Mice. Probably decomposes to phosphine in the stomach and is absorbed both as phosphine and as the phosphide. It has	1.5 to 2.5%	

a toxic action on the heart, liver and kidneys. Death occurs from heart and kidney failure.

Abbreviations

1.	ACME	ACME Organics Pvt. Ltd.
2.	Advance	Advance Pesticides
3.	Agrimaxx	Agrimaxx.....
4.	Aimco	AIMCO Pesticides Ltd.
5.	Amber	Amber Crop Science Pvt. Ltd., New Delhi
6.	Ambuja	Ambuja Agrochem Industries
7.	AOL	Agrico Organics Ltd., New Delhi
8.	Arysta	Arysta Crop Science Ltd.
9.	Atul	Atul Ltd.
10.	BASF	BASF India Ltd.
11.	Bayer	Bayer Crop Science India Ltd.
12.	Bhagiratha	Bhagiratha Chemicals & Industries Ltd. (BCIL)
13.	Bharat	Bharat Group of Pesticides (Bharat Rasayan Ltd., Bharat Insecticides Ltd. & BR Agrotech Ltd.)
14.	Bio-Stadt	Bio-Stadt India Ltd.
15.	Canary	Canary Agro Chemicals Pvt. Ltd.
16.	CAPL	Coromandel Agrico Pvt. Ltd.
17.	CCIL	Crop Chemicals India Ltd.
18.	CFC	Chambal Fertilizers & Chemicals Ltd., Ahmadabad
19.	Chemet	Chemet Chemicals Ltd.
20.	Cheminova	Cheminova – A subsidiary of FMC Corporation
21.	Chemtura	Chemtura Agro Solutions
22.	CLSL	Crop Life Science Ltd.
23.	CoroAgrico	Coromandel Agrico Pvt. Ltd.
24.	Coromandel	Coromandel International Ltd.
25.	CropGrowth	Crop Growth (India) Pvt. Ltd.
26.	Crystal	Crystal Crop Protection Pvt. Ltd.
27.	Devidayal	Devidayal Sales Ltd.
28.	Dhanuka	Dhanuka Agritech Ltd.
29.	Dharti	Dharti Agritech
30.	Dow	Dow Agro Sciences
31.	DuPont	Dupont Crop Protection India Ltd.
32.	Excel	Excel Crop Care Ltd.
33.	FMC	FMC Corporation India Ltd.
34.	GAICL	Gujarat Agro Industries Corporation Ltd.
35.	Gharda	Gharda Chemicals Ltd.
36.	GIL	Gujarat Insecticides Ltd.
37.	GKR	Gujarat Krishi Rasayan Pvt. Ltd.
38.	GNFC	Gujarat Namadavelly Fertilizers Company Ltd., Bharuch
39.	Godrej	Godrej Agrovet
40.	GPL	Gujarat Pesticides Ltd.
41.	GSFC	Gujarat State Fertilizers Company Ltd., Vadodara
42.	GSP	GSP Crop Science Pvt. Ltd.
43.	HCL	Hyderabad Chemical Ltd.
44.	Hikal	Hikal – Kalyani Group
45.	HIL	Hindustan Insecticides Ltd. (A Govt. of India Enterprise)
46.	HPM	hpm
47.	IFFCO	Indian Farmers Fertilizers Co-operative Ltd., Kalol
48.	IIL	Insecticides (India) Ltd.

49.	Indiclay	Indiclay.....
50.	Indofil	Indofil Industries Ltd.
51.	IPL	India Pesticides Ltd.
52.	IPL	Indian Potash Ltd., Madras
53.	Jubllant	Jubilant Industries Ltd.
54.	KCS	Krushi Crop Science Pvt. Ltd.
55.	Kilpest	Kilpest India Ltd.
56.	KREPL	Krishi Rasayan Exports Pvt. Ltd.
57.	KRIBHCO	Krishak Bharti Co-operative Ltd., Ahmadabad
58.	Liberty	Liberty Phosphate Ltd, GIDC, Nandesari, Vadodara
59.	MIL / MOL	Meghmani Industries Ltd. / Meghmani Organics Ltd.
60.	Mission Bio-Tech	Mission Bio-Tech Pvt. Ltd.
61.	Monsanto	Monsanto India Ltd.
62.	NACL	Nagarjuna Agro Chemicals Ltd.
63.	Nagarjuna	Nagarjuna Agrichem Ltd.
64.	Nirma	Nirma Industries Ltd., Ahmedabad
65.	Oshnic	Oshnic Crop Science Ltd.
66.	PCCPL	Punjab Chemicals & Crop Protection Ltd.
67.	Pearl	Pearl Enterprise (India)
68.	PI Ind.	PI Industries Ltd.
69.	Pioneer	Pioneer Pesticides Ltd.
70.	Ravi	Ravi Organics Ltd.
71.	RCF	Rashtriya Chemicals & Fertilizers Ltd., Trombay
72.	Sabero	Sabero Organics Gujarat Ltd.
73.	Safex	Safex Chemicals (India) Ltd.
74.	SFCL	The Scientific Fertilizer Co Pvt. Ltd.
75.	Sharda	Sharda Cropchem Ltd.
76.	Shivalik	Shivalik Agro Chemicals
77.	Siddharth	Siddharth Chemicals
78.	SKACC	Shri Kisan Agro Chemicals Corporation (India)
79.	Sudarshan	Sudarshan Chemical Industries Ltd. (SCIL)
80.	Sujanil	Sujanil Chemo Industries
81.	Sulphur Mills	Sulphur Mills Ltd.
82.	Sumil	Sumil Chemical Industries Pvt. Ltd.
83.	Sumitomo	Sumitomo Chemical India Pvt. Ltd.
84.	SuperCSL	Super Crop Safe Ltd.
85.	Swal	Swal Corporation Ltd.
86.	Swastik	
87.	Syngenta	Syngenta India Ltd.
88.	TATA	Rallis India Ltd. – A Tata Enterprise / Tata Chemicals Ltd.
89.	Tropical	Tropical Agrosystem (India) Pvt. Ltd.
90.	UPL	Union Phosphorus Ltd.
91.	Vallabh	Vallabh Pesticides Ltd.
92.	Vimax	Vimax Crop Science
93.	Vinsent	Vinsent
94.	Vizien	Vizien Organics, Azadpur (New Delhi)
95.	Willowood	Willowood Crop Sciences Pvt. Ltd.
96.	Yesell	Yesell Industries Ltd.

FORMULATION	
1. A	Aerosol
2. A.I.	Active Ingredient
3. AF	Aqueous Flowable
4. AS	Aqueous Solution or Aqueous Suspension
5. B	Bait
6. C	Concentrate
7. CG	Concentrate Granules
8. CM	Concentrate Mixture
9. CS	Capsule Suspensions
10. D	Dust
11. DF	Dry Flowable
12. DP	Dust able Powder
13. DS	Soluble Dust
14. EC or E	Emulsifiable Concentrate
15. EW	Emulsion, Oil in Water
16. FL or F	Flowable (Liquid)
17. FS	Flowable Concentrate for Seeds or Flowable Slurry
18. GL	Gel
19. GR or G	Generic Granules / Granules
20. L	Liquid (Flowable)
21. LC	Liquid Concentrate or Low Concentrate
22. LV	Low Volatile

23. M or ME	Micro Encapsulated
24. MTF	Multiple Temperature Formulation
25. OD	Oil Dispersion
26. P or PS	Pellets
27. PGP	Plant Growth Promoter
28. PGR	Plant Growth Regulator
29. RTU	Ready-to-Use
30. S	Solution
31. SC	Suspension Concentrate
32. SD	Soluble Dust
33. SG	Soluble Granules
34. SL	Soluble (Liquid) Concentrate
35. SP	Soluble Powder or Soluble Packet
36. TB	Tablets
37. ULV	Ultra Low Volume Concentrate or Ultra Low Wetttable
38. WDG or WG	Wetttable Dispersible Granule
39. WP or W	Wetttable Powder
40. WS	Water Soluble or Water Dispersible Powder for Seed
41. WSC	Water Soluble Concentrate
42. WSG	Water Soluble Granules
43. WSL	Water Soluble Liquid
44. WSP	Water Soluble Powder or Water Soluble Packet
45. ZC	Zeon (Technology) Concentrate

ENGLISH NAME	GUJARATI NAME
1. Angular Leaf Spot	
2. Anthracnose	
3. Back Rust	SF/M U[~
4. Black Rot	
5. Blast	a,F:8
6. Brown Rust	E]BZM U[~
7. Buck Eye Rot	
8. Cigar End Rot	
9. Collar Rot	

10. Damping Off	
11. Downy Mildew	S]T],
12. Early Blight	VFUMTZM sJC[,Mf ;]SFZM
13. Fly Speck	
14. Fruit Rot	O/GM ;0M
15. Late Blight	5FKMTZM sDM0Mf ;]SFZM
16. Leaf Blight	5FGGM ;]SFZM
17. Leaf Spot	5FGGF\ 85SF\GM ZMU
18. Ripe Rot	
19. Rust	

20. Scab	
21. Sigatoka Leaf Spot	
22. Sooty Blotch	
23. Tapioca	
24. Tikka	
25. Tip Rot	
26. Yellow Disease	