<table>
<thead>
<tr>
<th>Technical</th>
<th>INSECTICIDES / AGRACIDES / MITICIDES</th>
<th>Application</th>
<th>Dosage</th>
<th>Mode of Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Abamectin 1.8% EC</td>
<td>Vertimec (Syngenta), Tagmeck 1.9 EC (Tropical), ABC 1.85% EC (KR)</td>
<td>✓ Red mite of strawberry, cotton, cucumber, potato, soybean, tomato and sweet melon ✓ Leaf miners of sugarcane</td>
<td>50-100 ml/acre, 5-10 ml/pump</td>
<td>Chloride channel activators group. Acaricide</td>
</tr>
<tr>
<td>2. Acephate 75% SP</td>
<td>Starthene (Swall), Ortheone (Arysta), Missile (Devidayal), Megastar (ML), Lancer (UPL), Oval (PI Ind.), Rayasan Phate (KR), Aoexel (Excel), Kingmax (Vinmax), Asatral (TATA), Accent 787 (Sumil), Millat (ILL), Beeem (Klipest), Tagage (Tropical), Luicd (Cheminova), Lion (SuperCSL), Sritaf (Crystal), Ortain (Coromandel), Hiphate (HIL), Ample (Advance), Rythane (Ramcides), Corohamp (CAPL), Topsis (Atul), Molphate (GP), Top-O-Top (CGI), King Phate (KCS), Acesol (Sulphur Mills), Vega (PPCPL), Pae (Nagarjuna), Topsis (Atul), Tremor (BioStadt), Ace (Canary), Willisce (Willowood), Chettak (GSP), Archa (Amber), Bhoochal 75 (AOL)</td>
<td>✓ 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 &amp; Brown Leafhoppers, Brown Plant Hoppers ✓ L, L 5MS8L TYF TOTL1F H[JL R]:LIF HLF[TGF IG]I^&lt;6 D88[^P]</td>
<td>300-400 gm/acre 20-25 gm/pump</td>
<td>A versatile organophosphate group insecticide with both contact and systemic.</td>
</tr>
<tr>
<td>3. Acephate 95% SG</td>
<td>Hunk (TATA)</td>
<td>✓ It targets Stem borer, leaf folder &amp; BPH on Paddy. ✓ It has strong systemic molecule and is highly soluble and longer duration control. It has less odor and hence easy to use. It has got a good synergistic effect with Buprofezin 25% SC against rice BPH</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Acetamiprid 20% SP</td>
<td>Manik (TATA), Ekka (KR), Rapid (Crystal), Rekord (DuPont), Active (Devidayal), Award (ML), King Prid (KCS), Atoxel (Excel), Acela (UPL), Echo 797 (Sumil), Stona (Vinmax), Lift (Indoffi), Dhan Freet (Dhanuka), Crop Pride (NACL), Sharp (ILL), Proud (Klipest), Tagride (Tropical), Super (SuperCSL), Scuba (Coromandel), Hiphile (HIL), Armour (Advance), Acelon (CAPL), Abis (Atul), Quick (CLSL), Pounce (FMC), Alfastar (Swall), Guru (UPL), Karfu (Kilpest), Safari (SuperCSL), Dash 5% (Nagarjuna), Aatank (Dhanuka), Acefex (Excel), Starthene (Swall), Sumo 3G (IIL), Prachand 3G (Kilpest), Rapid (Crystal), Ortain (Coromandel), Hilphate (HIL), Ample (Advance), Rythane (Ramcides), Corohamp (CAPL), Topsis (Atul), Molphate (GP), Top-O-Top (CGI), King Phate (KCS), Acesol (Sulphur Mills), Vega (PPCPL), Pae (Nagarjuna), Topsis (Atul), Tremor (BioStadt), Ace (Canary), Willisce (Willowood), Chettak (GSP), Archa (Amber)</td>
<td>✓ For Jassids, Thrips &amp; Aphids 40-60 gm/acre &amp; &amp; for whitefly 60-80 gm/acre in Cotton ✓ For Aphis &amp; Aphids 40-60 gm/acre &amp; for Whitefly 60-80 gm/acre in chilli ✓ DM,MDX4 Y % L</td>
<td>TFY</td>
<td>O[NDFBFGL IG]I^&lt;6 D88[^P]</td>
</tr>
<tr>
<td>5. Alpha-Cypermethrin 10% WP</td>
<td>Alfastar (Swall), Guru (UPL), Karfu (Kilpest), Safari (SuperCSL), Dash 5% (ML), Dolphin (GSP)</td>
<td>✓ Boilworms in cotton</td>
<td>200-300 ml/acre</td>
<td>Contact and Stomach. Synthetic pyrethroid group</td>
</tr>
<tr>
<td>6. Alphamethrin 10% EC</td>
<td>Mig10 (Devidayal), Legend (ML), Grand 301 (Sumil) Tata Alpha (TATA), Gem (Indoffi), Nayak (ILL), Thrill (Tropical), Numethrin (Cheminova), Alpha (CR), Vasuki (CGI), Siver (Sulphur Mills), Stop 10 EC (BioStadt), Alpha (Canary), Anagold (CCIL)</td>
<td>✓ It is synthetic and It is effective against lepidopteran and sucking pest. (5FAZL -&gt;4 L,L,LL$E82L CL,IMVLY -&gt;)4 O/K[NS]&gt;P5PS,4 A DUC4/L4 SOM/M4 OF/L4 UZ4]F,4 MIALG4 VFAF4 D2RF4]2 L]U4 E4]LF YVg FXSEFHL DF8[P</td>
<td></td>
<td>Broad spectrum synthetic pyrethroid insecticide and has the capability of quick knockdown effect. Synthetic pyrethroid group</td>
</tr>
<tr>
<td>7. Bifenthrin 10% EC</td>
<td>Hectorast (Swall), Rock (KR), Metasat (Sumil), Markar (Dhanuka), Super Star (ILL), Bammerr (Tropical), Conister (Coromandel), Cenrix (Sulphur Mills), Rockstar (Shivalik), Klinpop (BioStadt), Wiltinrr (Willowood), Viklap (Amber)</td>
<td>✓ R[,LIF HLF[TG]I^&lt;I/MGF IG]I^&lt;6 D88[^P</td>
<td>35-40 ml/pump</td>
<td>Synthetic pyrethroid group</td>
</tr>
<tr>
<td>8. Bifenthrin 2.5% EC</td>
<td>Swal Home (Swall)</td>
<td>✓ Home use</td>
<td></td>
<td>House hold insecticide. Synthetic pyrethroid insecticide.</td>
</tr>
<tr>
<td>9. Buprofezin 25% SC</td>
<td>Jawaa (DuPont), Flots (Bayer), Trust (Swall), Iny (Dow), Devifezin (Devidayal), Buprostar (ML), Hillbaze (HIL), PI Bupro (PI Ind.), Applaud (TATA), Braun 111 (Sumil), Apple (Dhanuka), Phenom (ILL), Tagvolante (Tropical), Tribune (Crystal), Ninja (Coromandel), KrilMark (KR), Cordon (Advance), Bravo (Sulphur Mills), Benji (Nagarjuna), Banzo (BioStadt), Jantar (Canary), Delgent (Willowood), Awaksh (Amber)</td>
<td>✓ Effective on Homopterous insects such as Plant Hoppers, Leaf hoppers, White Ries, 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. ✓ LF TOTL1F4</td>
<td>O[NDFBF 1D]H DLAUGF</td>
<td>RMB IG]I^&lt;6 D88[^P</td>
</tr>
<tr>
<td>11. Carbosulfan 3% GR</td>
<td>Furadan (FMC), Starfuron (Swall), Sumo 3G (ILL), Prachand 3G (Klipest), Furon G (Crystal), Fury (Nagarjuna)</td>
<td>✓</td>
<td></td>
<td>Carbamates group</td>
</tr>
<tr>
<td>12. Carbosulfan 25% EC</td>
<td>Marshal (FMC), Aastank (Dhanaka), Aayush (Coromandel)</td>
<td>✓</td>
<td></td>
<td>Carbamates group</td>
</tr>
</tbody>
</table>
### 13. Cartap Hydrochloride 4% GR
- **Kitap 4G (KR), Kaardon 4G (UPL), Karvan (Devidayl), Caidal 4G (Dhanuka), Cartox (TATA), Cororna GR (Sumil), Beacon GR (Indoffil), Indian 4G (IL), Kildon 4G (Kilpest), Fast 4G (Tropical), Sudan 4G (SuperCSL), Nidan 4G (Crystal), Parry/Ratna (Coromandel), Hilcartap 4G (HIL), Tria (Advance), Grip (Sulphurmills), Captor 4G (PCCPL), Nagarjuna 4G (Nagarjuna), Capsi GR (Atul), Dartriz 4G (BioStadt), Cartap 4G (Canary), Willtap 4G (Willoword), Pritivi 4G (Kamrak), Eidan 50SP (CCIL), Param SP (AOL)**

- **Uses:** For controlling Stem Borer, Leaf Folder and Whorl Maggot of Rice.

- **Surface:** 8-10 kg/acre

- **Contact:** Systemic & Contact. Neemtoxin analogues group

### 14. Cartap Hydrochloride 50% SP
- **Kitap 50SP (KR), Starktop-50 (Swai), King Dan (KCS), Kaardon 50SP (UPL), Karvan Plus (Devidayl), Caidal 50SP (Dhanuka), Cororna 50SP (Sumil), Beacon SP (Indoffil), Indian 50SP (IL), Kildon (Kilpest), Fast 50 (Tropical), Sudan 50 (SuperCSL), Nidan 50SP (Crystal), Joshp (Coromandel), Hila/cartap 50SP (HIL), Grip 50SP (Sulphurmills), Captor 50SP (PCCPL), Caspi SP (Atul), Dartroz 50SP & Woktap 50SP (BioStadt), Mantar 50SP (Canary), Willtap 50SP (Willoword), Pritivi 50SP (Amber), Eidan 4G (CCIL), Param 50SP (AOL)**

- **Uses:** For controlling Stem Borer, Leaf Folder in Rice,

- **Surface:** 50 ml/pump

- **Contact:** Systemic & Contact. Neemtoxin analogues group

### 15. Chlorantraniliprole 4% GR
- **Ferterra (DuPont)**

- **Uses:** Effective and long duration control of early and top borers in sugarcane.

- **Surface:** Preventing the buildup of the pest population. New class of chemistry Anthranilic Diamides group

### 16. Chlorantraniliprole 18.5% SC
- **Corag (DuPont)**

- **Uses:** Urosupies of oxidative phosphorylation via disruption of the proton gradient

- **Surface:** Non-systemic with contact, stomach & respiratory action

### 17. Chlofenpyr 10% SC
- **Intrepid (BASF), Lepido (PI Ind.), Record (Crystal)**

- **Uses:** Non-systemic, Contact, stomach & respiratory action

- **Surface:** Preventing the buildup of the pest population. New class of chemistry Anthranilic Diamides group

### 18. Chlorpyrifos 1.5% DP
- **Deviban 1.5 DP (Devidayl), Kilzax D & Kilzex 0.25% DP (Kilpest)**

- **Uses:** Strong contact, stomach & slight fumigant action. It Belongs Organophosphate Insecticide group.

### 19. Chlorpyrifos 10% GR
- **Deviban 10G (Devidayl), Suldrin GR (SuperCSL), Hilban 10 GR (HIL)**

- **Uses:** Non-systemic with broad spectrum contact, stomach and respiratory action with vapor action and a quick knockdown effect. It Belongs Organophosphate Insecticide group.

### 20. Chlorpyrifos 20% EC
- **Krishan 20 (KR), Starban (Swai), Dursban (Dow), Megaban (ML), Deviban 20 (Devidayl), Chloroban (UPL), Chloronozide (KCS), Banest 20 (Arysta), Toxic 20 (Excel), Une 501 (Sumil), Leptido (PI Ind.), Record (Crystal), Cypermethrin 10% EC, Paraffin 10% EC, Herilin 10% EC, Coro 50SP (CoroMandel), Pari 50SP (PCCPL), Karvan Plus 50SP (Devidayl), Tria 50SP (Advance), Grip 50SP (Sulphurmills), Captor 50SP (PCCPL), Caspi SP (Atul), Dartroz 50SP & Woktap 50SP (BioStadt), Mantar 50SP (Canary), Willtap 50SP (Willoword), Pritivi 50SP (Amber), Eidan 4G (CCIL), Param 50SP (AOL)**

- **Uses:** 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, Squash Bugs, Hispa, Leaf Roller, Gall Midge, Stem Borer, Aphid, Padi Borer, Cutworm, Black Bug, Early Shoot & Stalk Borer, Pyralis, Barklome, White Fly, Grey Weevil, Root Grub, Shoot & Fruit Borer, DBM, Leathopper, Black Citrus Aphid, Ground Beetle, Locust Hopper.

- **Surface:** 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), Toxic 48 EC (Excel), Megaban Super (ML), Deviban TC (Devidayl), Sabcan (Shivalik), Chowkidar (GIL), Leptido 50 IL, Tagban-TC (Tropical), Intrepid (Coromandel), Hilban 50 (HIL), Leefan-50 (Advance), Ooschol (Oshnic), Kartoso 50 (Amber), Gold Ban (CCIL), Hiltor (AOL)**

- **Uses:** Non-systemic with contact, stomach & respiratory action. It Belongs Organophosphate Insecticide group.

### 22. Chromafenozide 80% WP
- **Dodger (PI Ind.)**

- **Uses:** It Belongs Organophosphate Insecticide group.

### 23. Cnipat 50% WDG
- **Dentotsu (Sumitomo)**

- **Uses:** Used for seed treatment in groundnut for control of white grub and leaf minor of vegetables

- **Surface:** Insecticide of Neonicotinoids group

### 24. Cypermethrin 10% EC
- **Kricyp 10 (KR), Sarcop 10 (Swai), Megacoper (ML), Cyperon (UPL), Devipiron 10 (Devidayl), Superkiper (Dhanuka), Cypermil 10 (Kilpest), Challenger 10 (Tropical), Shakti 10 (Cheminova), Super Jet (SuperCSL), Ciperol (PCCP), ASP-Action (CCIL), Shera 10 (AOL)**

- **Uses:** Non-systemic, Contact & Stomach. Synthetic pyrethroid group

### 25. Cypermethrin 25% EC
- **Cymbush (Syngenta), Kricyp-25 (KR), Sarcop-25 (Swai), Megacoper (ML), Cyxur (UPL), Coit (PI Ind.), Devipiron 25 (Devidayl), Maxkill (Vimax), Pyro 401 (Sumil), Super Kilder 25 (Dhanuka), Crop Cyper (NACL), Super Fighter (ILL), Cypercot 2E (Kilpest), Mechlerger 25 (Tropical), Shakti 25 (Cheminova), Super Jet+(SuperCSL), Jackpot 25 (Crystal), Cyperkill (Coromandel), Hinarang 25EC (Yessell), Ceropyrs 25 (Sulphurmills)**

- **Uses:** Non-systemic, Contact & Stomach. Synthetic pyrethroid group

**Collected and Prepared By:** Jetshibhai A. Patel, (M.Sc. Agril.), Mo.: 9824670382, E-mail: jetshib89@gmail.com, Last Updated on: 05th August, 2016
<table>
<thead>
<tr>
<th>No.</th>
<th>Insecticide</th>
<th>Formulation</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>26.</td>
<td>Cypermethrin 5% EC</td>
<td>Smash 5 EC (BioStadt)</td>
<td>✓ Boll worm in cotton, Fruit borer in tomato, chilli and okra, leaf folder, stem borer, whoot 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 Cicadellinea, Heteroptera, Thysanoptera; selected thrips species, Diptera, Cokoptera and Orthoptera. Synthetic pyrethroid group. It is non systemic insecticide which acts by contact and ingestion, and exhibiting a broad spectrum.</td>
</tr>
<tr>
<td>27.</td>
<td>Deltamethrin 11% EC</td>
<td>Decis 100 (Bayer)</td>
<td>✓ Boll worm &amp; sucking pests in cotton, thrips, leaf roller &amp; semi-looper in tea, shoot &amp; fruit borer and jassid in okra, leaf miner in groundnut, hopper in mango, fruit borer, Heliothis and Spodoptera in chilli, heliobis 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.</td>
</tr>
<tr>
<td>28.</td>
<td>Deltamethrin 2.8% EC</td>
<td>Decis 2.8 (Bayer), Shasta (Devidayal), Tagcis 100 – 11% EC (Tropical), Tagcis &amp; Tagcis Flow 2.5% SC (Tropical)</td>
<td>✓ Boll worm &amp; sucking pests in cotton, thrips, leaf roller &amp; semi-looper in tea, shoot &amp; fruit borer and jassid in okra, leaf miner in groundnut, hopper in mango, fruit borer, Heliothis and Spodoptera in chilli, 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.</td>
</tr>
<tr>
<td>29.</td>
<td>Difenthion 50% SP</td>
<td>Hopcide 50EC</td>
<td>✓ Synthetic pyrethroid group. It is non systemic insecticide which acts by contact and ingestion, and exhibiting a broad spectrum.</td>
</tr>
<tr>
<td>30.</td>
<td>Dicofol 18.5% EC</td>
<td>Polo/Pegasus (Syngenta), Krijet/Kriet Super (KR), Alero (Sumil),</td>
<td>✓ Boll worm &amp; sucking pests in cotton, thrips, leaf roller &amp; semi-looper in tea, shoot &amp; fruit borer and jassid in okra, leaf miner in groundnut, hopper in mango, fruit borer, Heliothis and Spodoptera in chilli, 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.</td>
</tr>
<tr>
<td>31.</td>
<td>Dinofdal 50% EC</td>
<td>Danitol (Sumitomo)</td>
<td>✓ Boll worm &amp; sucking pests in cotton, thrips, leaf roller &amp; semi-looper in tea, shoot &amp; fruit borer and jassid in okra, leaf miner in groundnut, hopper in mango, fruit borer, Heliothis and Spodoptera in chilli, 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.</td>
</tr>
<tr>
<td>32.</td>
<td>Diflubenzuron 2% GR</td>
<td>Barcelo GR (Bayer)</td>
<td>✓ Treated 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. Non-systemic, Contact.</td>
</tr>
<tr>
<td>33.</td>
<td>Diflubenzuron 2% TB</td>
<td>Barcelo TB (Bayer)</td>
<td>✓ Treated for the control of mosquito larvae of Aedes aegypti, Anopheles stephensi and Culex quinquefasciatus in unused coolers. 0.5-1.0 ppm / 40 lit. of water. Non-systemic, Contact.</td>
</tr>
<tr>
<td>34.</td>
<td>Dimethoate 30% EC</td>
<td>Roger (Cheminova), Tar-909 (Swali), Nugor (UPROG), Progor (Pioneer), Devign 30 (Devidayal), Talgor (TATA), Crop Diamond (NACL), Rogorin (II), Kilgore 30 E (Kilpest), Tagore (Tropical), Kigor (SKACC)</td>
<td>✓ It is highly effective in controlling the sucking and caterpillar pests. Systemic, contact &amp; stomach. It is highly compatible with other insecticides &amp; fungicides. It Belongs Organophosphate Insecticide group.</td>
</tr>
<tr>
<td>35.</td>
<td>Dinotefuran 20% SG</td>
<td>Osheen (Piperid), Token (Indoffi), Osmin 20SG (BioStadt)</td>
<td>✓ Synthetic pyrethroid group. It is non systemic insecticide which acts by contact and ingestion, and exhibiting a broad spectrum.</td>
</tr>
<tr>
<td>36.</td>
<td>Emamectin Benzoate 5% SG</td>
<td>Proclaim (Syngenta), Missisle (Crystal), Emstar 5 (KR), Starclalm (Swali), Robot (Exco), Spict (UPLO), Empower (Sumil), Talkeal (Gharda), Wagon (Vimax), EM-1 (Dhanuka), Xplode (IIL), Benzer (Coromandel), Emzet (Swul Mills), Trust (Nagarjuna), Bioblad &amp; Inclalm (BioStadt), Claim (Canary), Emeracto (Willowood), Proceed (Amber)</td>
<td>✓ It is very effective against Mites especially on Chilies, Cotton, Fruits and Vegetables. It is an Organosporus Insecticide &amp; Acaricide with quick knock down and long lasting residual activity. Non-systemic with predominantly contact action.</td>
</tr>
<tr>
<td>37.</td>
<td>Endosulfan 35% EC</td>
<td>Endostar (Swali), Thiokill (UPL), King Sulflan (KCS), Crop Endo (NACL), Kildawn (Kilpest), Su Sulflan (SuperCSL), Hildan (HIL), Dhira (PCPCL), Endon (CCIL)</td>
<td>✓ It belongs to Cyclodiene Organochlorines group of insecticide.</td>
</tr>
<tr>
<td>38.</td>
<td>Endosulfan 4% DP</td>
<td>Kildawn 4DF (Kilpest)</td>
<td>✓ It is an Organosporus Insecticide &amp; Acaricide with quick knock down and long lasting residual activity. Non-systemic with predominantly contact action.</td>
</tr>
<tr>
<td>39.</td>
<td>Ethion 50% EC</td>
<td>Talofinn (TATA), Krithion (KR), Milt-505 (Swali), Kitkill (UPL), King Mite (KCS), Fosmite (PI Ind.), Devistra (Devidayal), Vithion (Vimax), Figther (Kilpest), Sumite (SuperCSL), Hitime (HIL), Shakti (IPL)</td>
<td>✓ It is very effective against Mites especially on Chilies, Cotton, Fruits and Vegetables. It is an Organosporus Insecticide &amp; Acaricide with quick knock down and long lasting residual activity. Non-systemic with predominantly contact action.</td>
</tr>
<tr>
<td>40.</td>
<td>Etofenprox 10% EC</td>
<td>Treben Excel 10EC (BioStadt)</td>
<td>✓ Synthetic pyrethroid group.</td>
</tr>
<tr>
<td>41.</td>
<td>Etofenprox 30% EC</td>
<td>Dash 30EC (BioStadt)</td>
<td>✓ Synthetic pyrethroid group.</td>
</tr>
<tr>
<td>42.</td>
<td>Fenobucarb (BPMC) 50% EC</td>
<td>Knock (KR), Hichul (Devidayal), Blast (Tropical), Hopocide 50EC (BioStadt), Break (Willowood), Aachi (Bharat)</td>
<td>✓ Used to control hoppers. Non-systemic insecticide with contact action. Carbamates group.</td>
</tr>
<tr>
<td>43.</td>
<td>Fenpropatrin 10% EC</td>
<td>Danitol (Sumitomo)</td>
<td>✓ Pink bollworm, spotted bollworm and 3American bollworm. Insecticide</td>
</tr>
</tbody>
</table>
### Insecticide and acaricide

<table>
<thead>
<tr>
<th>Insecticide</th>
<th>Mode of Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>Neonicotinoids</td>
<td>It belongs to the Modern Neonicotinoids group of insecticides. It's remarkable systemic activity.</td>
</tr>
<tr>
<td>Phenyl Pyrazoles group</td>
<td>It's a novel group of chemicals with a unique mode of action to control various pests.</td>
</tr>
<tr>
<td>Neem</td>
<td>It's a novel Mite growth inhibitors group. It's a natural insecticide.</td>
</tr>
<tr>
<td>Synthetic Pyrethroid</td>
<td>It's a novel group. It's a synthetic insecticide.</td>
</tr>
<tr>
<td>Synthetic Pyrethroid Insecticide</td>
<td>It's a novel group. It's a synthetic pyrethroid.</td>
</tr>
<tr>
<td>Synthetic Pyrethroid</td>
<td>It's a novel group. It's a synthetic pyrethroid.</td>
</tr>
</tbody>
</table>

### 44. Fenpropathrin 30% EC
- **Moecrin (Sumitomo)**
- **Features**: Major pests in cotton, chili, brinjal, okra and lea

### 45. Fenpyroximate 5% EC
- **Sedna (TATA), K-Mit (KR), Pyromite (Excel), Dynamate Plus (ILL), Wilgate (Willowood)
- **Features**: Leathoppers, Mealybugs, Mites, Flaylam Red Spider Mite, Pink Mite, Purple Mite, Yellow Mite

### 46. Fenvalerate 0.4% DP
- **Devifien 0.4 DP (Devidaiyal), Fenocil 0.4 D (Klipest)
- **Features**: As per above— dose ---

### 47. Fenvalerate 20% EC
- **Krif (KR), Fenkoll (UPL), King Pen (KCS), Fenval 20 EC (Isagro Asia), Devifien (Devidaiyal), Tatafen 10 EC (TATA), Fenocil 20 E (Klipest), Final 20 (AOL)
- **Features**: 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 recommended as an Animal Ectoparasiticide and is highly useful for control of Termites in Agriculture, Forestry and in buildings.

### 48. Fipronil 0.3% GR
- **Regent GR (Bayer), Ruler 0.3GR (KR), Stargazette GR (Swail), Devigent 0.3GR (Devigiant Brand), Sonic TATA, Flornia GR (Sulmil), Fax GR (Dhanuka), Sargent GR (ILL), Tagagent GR (Tropical), Su-nil GR (Super CSL), Salvo GR (Coromandel), Fiprox G (Sulphur Mills), Avar (PCPCL), Monil (Atul), Janbaaz GR (BioStadt), Fipro 0.3 (Canary), Vycm (Amber)
- **Features**: It is recommended for control of Aphids, Jassids and thrips in Cotton, Bollworm in cotton, Stem borer and leaf folder of sugarcane.

### 49. Fipronil 2.92% EC
- **Agenda 25 EC (Bayer)**
- **Features**: 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.

### 50. Fipronil 5% SC
- **Regent SC (Bayer), Ruler (KR), Stargazette (Swail), Sonic Flo (TATA), Devigent Plus (Devigiant), Fiprox King (KCS), Vizent (Vinmax), Sonic Flo (TATA), Rabid (CILSI), Flornia 444 (Sulmil), Mahaveer (Ghanda), Fax SC (Dhanuka), Sargent SC (ILL), Tagagent SC (Tropical), Su-nil Super (Super CSL), Crigent SC (Crystal), Salvo SC (Coromandel), Frazzer (Advance), Fiprosph EC (Oshnic), Fiprox (Sulphur Mills), Monil SC (Atul), Janbaaz SC (BioStadt), Getter (Canary), Refree (GSP)
- **Features**: It targets Stem Borer, BPH, Green leaf hopper, Leaf folder, Gall midge, White backed plant hopper, Whori maggott on paddy, DBM on Cabbage, Thrps, Aphids, fruit borer on chilly, early root and shoot borer on sugarcane.

### 51. Fipronil 80% WG
- **Jump (Bayer), Ruler 80 (KR)**
- **Features**: Stem borer and leaf folder in rice and thraps in grape

### 52. Flubendiamide 20% WG
- **Fluton (PI Ind.), Takumi (TATA), Suraksha (Nagarjuna)**
- **Features**: Recommended for Heliolthis in cotton and Rice stem borer.

### 53. Flubendiamide 39.35% SC
- **Fame (Bayer)**
- **Features**: Boil worm in cotton, stem borer and leaf folder in rice, fruit borer in tomato. DBM in cabbages, pod borer in pigeon pea, black gram and Bengal gram, fruit borer in chilli and shoot borer in brinjal.

### 54. Hexythiazox 5.45% EC
- **Endurer (Coromandel), Dimite (Nagarjuna), Xmite & Maiden (BioStadt)**
- **Features**: For the effective control of mite

### 55. Imidachlorid 17.8% SL
- **Confidor (Bayer), Seamer (DuPont), Josh (KR), Imidastar (Swail), Imden (Dow), Courage (MIL), Midas 2000 (Devigiant), King Dor (KCS), Jumbo (PI Ind.), Imidacel 17.8 & 20 (Excel), Imda Gold (UPL), Expert 100 (Sumil), Sacidor (Shivaliki), V-Mida (Vinmax), Tatamida (TATA), Imigrow (CILSI), Expert 100 (Sumil), Atom (Indoffi), Media (Dhanuka), Crop Mida (NACL), Victor (ILL), Kildor (Klipest), Tropical Magic (Tropical), Chemida (Cheminvoga), Sumida (Super CSL), Parmyida (Coromandel), Hilimida (ILL), Hotshot (Sulphur Mills), Radiant (PCPCL), Mida (Nagarjuna), Ribo (Atul), Ultimo 200SS (BioStadt), Farrata (Canary), Leopard 17.8 SL (Willwood), Imidore (CILSI), Mida (AOL)
- **Features**: For the control of Homopteran insects like Aphids, Whiteflies, Thrips, and Whiteflies in Cotton. It's recommended for control of Aphids, Jassids, Thrps and Whiteflies in Cotton, Brown Plant Hopper, White Backed Plant Hopper, Green leaf Hopper in Rice, Jassids, aphids and thrps in Chill, Hoppers in Mango and Termites in Sugarcane.

### 56. Imidachlorid 30.5% SC
- **Confidor Super (Bayer), Josh Plus (KR), Protect (MIL), Super King (KCS), Jumbo (PI Ind.), MaxMida (Vinmax), Termax (TATA), Expert Super (Sumil), Victor Super (ILL), Tropical Magic Super (Tropical), Sumida 30.5 (Super CSL), Confidence Super (Crystal), Total Control (Oshnic), Hotshot Plus (Sulphur Mills), Leopard 30.5 SC (Willwood), Punj Super (Amber)
- **Features**: For control of termites in buildings, which can be used both for pre and post construction treatment. It is first non-repellent liquid Termitecide with a unique mode of action to control even toughest subterranean termite infestations through a process called "Lateral Soil Movement".

### 57. Insetacure D 8% (AOL)
- **Devipan (PI Ind.), Josh Plus (KR), Protect (MIL), Super King (KCS), Jumbo (PI Ind.), MaxMida (Vinmax), Termax (TATA), Expert Super (Sumil), Victor Super (ILL), Tropical Magic Super (Tropical), Sumida 30.5 (Super CSL), Confidence Super (Crystal), Total Control (Oshnic), Hotshot Plus (Sulphur Mills), Leopard 30.5 SC (Willwood), Punj Super (Amber)
- **Features**: It is a new generation Termitecide. 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), Tatanida 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), Tatanida 70WS (TATA), Josh 70 (KR), Dizine (Excel), Global 777 (Sumil), Az-Fyre (Dhanuka), Victor Plus (IL), Tagmyre & Tropical Magic 70WS (Tropical), Pactus (Chemnovia), Sumida 70 WG (SuperCSL), Looper & Confidence 555 WS (Crystal), Hilmida WS (HIL), Pronto (Sulphur Mills), Eka (PCCP), Mida-G (Nagarjuna), Eden (BioStad), Hamster (Canary), Leopard 70WG (Willowood), Jalan (Amber)
   ✓ Used for seed treatment for control of sucking pests in Cotton, Okra and Chiliviz, Aphids, Jassids, Colorado Potato Beetle, Brown Plant hoppers, Rice Hoppers, Termites, Whiteflies, Thrips, White Backed Plant hoppers (ALHGF 58 DBF) A NIZ(S)-5 SFZGL R;LIF HJFTMGF VZ;SFZS IGI\6 DF8[P
   3-5 gm/kg 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 (ULP), Index (Devidayal), Vindoxa (Vimax), Indimax (Sumil), Dhawala Gold (Dhanuka), Avail (IL), Kaal (Klipost), Tagpower (Tropical), Super Indoxa (CSPL), Vantage (Sulphur Mills), Amisac (Atul), Indica (Willowood), Arav (Amber), Super Doxa (AOL)
   ✓ Boll Worm, Fruit Borer, Pod Borer in Cotton, Tomato, Chili, Pigeon pea
   ✓ >1/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 (Swallow), Ninja (Devidayal), Reeva 2.5 (TATA), Flex 801 (Sumil), Agent Plus (Indoffi), Bravo 250 (IIL), Sumo (Kilpest), Demand (Tropical), Spider (SuperCSL), Judo (Crystal), Hillamida (HIL), Jaguar (Sulphur Mills), Xylo (Atul), Kozuka (BioStad), Lambda2.5 (Canary), Samurai (GSP)
   ✓ It is recommended for control of Bollworms, Jassids and Thrips in Cotton and Leaf Roller, Stem Bomer, GLH, Gall midge, Hispa and Thrips in Rice.
   ✓ SSF;GL /MGL NIZ(V;Y)F E(L & S) >[DF4]\6 M [TDH &]BT SL85MG IGI\64 R;LIF HJFTMGF LLL S5ML84 Y[L%4 DM,MOXGLG] VX [UX IGI\6P] >[DF4] [UX I4]U/L4 AS5FdFV[ Y[L%4 DB8P]OF,UDZP,UFEDF2ZGL\>4 SFJ H/GFZL\>IP
   20-25 ml/pump
   Non-systemic, contact & stomach action & repellent properties. New generation synthetic pyrethroid group of chemicals. 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), LOC++ (KR), Novell (Sumil), Metro (ILL), Challanger (Sulphur Mills), Farata (Canary), Spanner (GSP), Sip (Amber)
   ✓ Synthetic pyrethroid group

62. Lambda Cyhalothrin 4.9% CS
   Matador (Syngenta), LOC++ (KR), Novell (Sumil), Metro (ILL), Challanger (Sulphur Mills), Farata (Canary), Spanner (GSP), Sip (Amber)
   ✓ 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 (ILL), Sumo Plus (Kilpest), Tag Command (Tropical), Spider Plus (SuperCSL), Judo Plus (Crystal), Hillamida (HIL), Lakshya (Advances), Jutho 5 EC (Yesell), Mustang (Sulphur Mills), Ray (PCCP), Xylo-5 (Atul), Lambda5 (Canary), Sunny (Willowood), Santri (GSP), Remand (Amber), Kataar (CCIL), Thiachi (AOL)
   ✓ Recommended for the control of Bollworms, Jassids and Thrips in Cotton, Leaf Roller, Stem Bomer, GLH, Gall midge, Hispa and Thrips in Rice.
   ✓ SSF;GL /MGL NIZ(V;Y)F E(L & S) >[DF4]\6 M [TDH &]BT SL85MG IGI\64 R;LIF HJFTMGF LLL S5ML84 Y[L%4 DM,MOXGLG] VX [UX IGI\6P] >[DF4] [UX I4]U/L4 AS5FdFV[ Y[L%4 DB8P]OF,UDZP,UFEDF2ZGL\>4 SFJ H/GFZL\>IP
   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
   Devimat 5 DP (Devidayal), Kropmal D (Klipost)
   ✓ Contact, stomach & respiratory action. It Belongs Organophosphate Insecticide group.

65. Malathion 50% EC
   Kilion (KR), Devimat 50 (Devidayal), Milthion (ILL), Lakshya (Klipost), Tagthion (Tropical), Cythen (Coromandel), Hillania / Hillthion (HIL), Salmithion (Sulphur Mills), Malathion 5EC (BioStad)
   ✓ Contact, stomach & respiratory action. It Belongs Organophosphate Insecticide group.

66. Metaldehyde 2.5% DP
   Snaikiki (PI Ind.)
   ✓ Voltage dependent sodium channel blockers group

67. Methomyl 40% SP
   Ketin (KR), Lannate (DuPont), Dunet (Dhanuka), Dash (Indoffi), Draagon (Tropical), Scorpio (Sulphur Mills)
   ✓ Carbamates group

68. Methyl Parathion 2% DP
   Gramexin (Pioneer), Devithion 2DP (Devidayal), Kldot 2DP (Klipost), Taggar (Tropical)
   ✓ Non-systemic, contact, stomach, and some respiratory action. It Belongs Organophosphate Insecticide group.

69. Methyl Parathion 50% EC
   Devithion 50 (Devidayal), Kldot 50 E (Klipost)
   ✓ Non-systemic, contact, stomach, and some respiratory action. It Belongs Organophosphate Insecticide group.

70. Monocrotophos 36% SL
   Phoskill (UPL), Rasayanaphos (KR), Monostar (Swallow), Megamono (ML), King Phos (KCS), Crotocel (Excelf), Devimono (Devidayal), Monocip (Vimax), Monogli (GIL), Kevin 362 (Sumil), Crop Mono (NACL), Monocil (ILL), Kiphex 36% WSC (Klipost), Macrophos (Tropical), Sumo (SuperCSL), Luphos (Crystal), Parysmon/ Monophos (Coromandel), Hilcon (HIL), Admono (Advance), Monofos 36 (SafeX), Monosul (Sulphur Mills), Shura (PCCP)
   ✓ Beet Armyworm, Boll Weevil, Bollworm, Fleahoppers, Lygus Plant Bugs, Mites, Cutworm, Lesser Cornstalk Borper, Peach Aphid, Tobacco Bud Worm, Tobacco Hornworm, Vegetable Weevil. BPH, GLH, Leaf Folder, Yellow Stem borper, Pod Borer, Bollworms, Aphid, Jassid, Thrips, Whitefly in Paddy, Pests, Cotton
   ✓ 350-500 ml/acre
   Systemic and Contact. It Belongs Organophosphate Insecticide group.

72. Niclosamide 70% WP
   Deadbol 70WP (BioStad)
   ✓ Anthrallinic Diamide group
| 73. | Novaluron 10% EC | Rimon (Indofil), Noval (KR), Remostar (Swal), Novamanix (Vimax), DNA (Willwood) | ✓ | IGR (Insect Growth Regulator) group |
| 74. | Permethrin 25% EC | Perkil (UPL), Agniben (Devidayal), Hawk (ILL), Tag Bush (Tropical), Permasect (Coromandel) | ✓ | Contact & stomach action, having a slight repellent effect. Synthetic pyrethroid group |
| 75. | Phenthoate 50% EC | Phendral (Coromandel), Salvo 50EC (BioStadt) | | |
| 76. | Phorate 10% SG/CG | Foratox (Pl Ind.), Kaymet (KR), Staphor 10G (Swal), Umet (UPL), Thimet 10CG (ILL), Tuskar 10 G (Kilpest), Helmet (Tropical), Sripenth (Crystal), Hilforte CG (HIL), Hilmet 10G (Canary) | ✓ Stem Borer, Hoppers, Shoot fly, Aphid, Borer, 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. | Profenofos 50% EC | Curacron (Syngenta), Celcron (Excel), Jashn (TATA), Krikhos (KR), Proven (MIL), King Cron (KCS), Carina (Pl Ind.), Devi-soldier (Devidayal), Profenofos 50 EC (GAICL), Banjo (ILL), Maxcron (Vimax), Jashn (TATA), Bahadur 201-40% (Sumil), Tagpro (Tropical), Aurifos (Chemnoviva), Sucron (SuperCGL), Kikron (Crystal), Ajanta (Coromandel), Hillos (HIL), Laser (Advance), Profos (Sulphur Mills), Kombat (PCCPL), Profex (Nagarjuna), Orac (Alu), Prhar & 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. | 50 ml/pump | It belongs to a group called Organophosphate. Non-systemic insecticide & Acaricide with contact & stomach action. |
| 79. | Propargite 57% EC | Omitone (Dhanuka), Propastar (Swal), Simbhaa (Pl Ind.), Mastamate (Chemtura), Teeka (Nagarjuna) | ✓ | 400-600 ml/acre | Organotin miticides group. Inhibitors of mitochondrial ATP synthase |
| 80. | Pymetrozine 50% WG | Chess (Syngenta) | ✓ Immediate aphid and whitefly control | 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), Ketherpos 1.5 D (Kilpest) | ✓ | Contact and stomach action |
| 82. | Quinalphos 25% EC | Ekualux (Syngenta), Krilux (KR), Starlux 25 EC (Swal), Deviquin 25 (Devidayal), Virsta (Vimax), Flash (Indofil), Ketherpos 25 E (Kilpest), Vazra-25 (Chemnoviva), 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. Macrocylic 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 semilinopof of soybean | 60 ml/acre 6 ml/pump | Spinosad is a fermented product. It is a contact insecticide. It also provides long duration control. Macrocylic lactone (Spinosyns) group |
| 85. | Spiromesifen 22.9% SC | Oberon (Bayer), Voltage (Pl Ind.) | ✓ Red spider mite of brinjal, tea, okra and apple, European red mite in apple, yello mite of chili, white fly and mite of tomato and cotton | 250 ml/acre 25 ml/pump | Novel folicur contact insecticide / acaricide belonging to the chemical class of Ketones. 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. | Thiachioprid 21.7% SC | Alanto (Bayer), Splendour (Chemnoviva) | ✓ 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, acaricidal 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. | Thiamefloxan 25% WG | Actara (Syngenta), Kni-Oxm (KR), Battalion (Swal), Theme (MIL), King Tara (KCS), Maxima (Pl Ind.), Wondex (Excel), Renova (UPL), Devitara (Devidayal), Maestro 707 (Surril), Maxtara (Vimax), Gillara (GL), Click (Indofil), Areva (Dhanuka), Arrow (ILL), Actor (Kilpest), Tagxone (Tropical), Super Tara (SuperCSSL), 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 |
90. Thiamethoxam 30% FS
Slayer Pro (GSP), Ashshed Super (Amber), ..........(Sumil)
✓ N2/S 5% SFZGL R;LIF HJFTMGF V;ZSFZS IGF+6 DF8/P
✓ 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. ±LJOG/LDF1,pWCV GV[0][MG/GF IGF+6 DF8/P 50 gm/acre. Jassids and other soil insects ±DF1,UZDF1, LF R;LIF VGV [HJOHNF HJFTMGF IGF+6 DF8/P 50 gm/acre. Termite and shoot borer in sugarcane ±XGLDF, pWV GV[ [0][8 SMZL BFGZL »I/GF IGF+6 DF8[P 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), Tuzo (MIL), Triozel (Excel), Current 440 (Devidayal), Taz (Sumil), Ghatak (Dhanuka), Crop Tryzo (NACL), Titan (ill), Kilthion (Kilpest), Kargil (Tropical), Trisof-40 (Cheminova), Suthion (SuperCSL), Hilzofos (HIL), Trizo (Advance), Triseco (Suiprul 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, White Backed Planthoppers, Hispa, Girdle Beetle, Leaf Miner, Epilachana Beetle, >»OGFXS »Q[NDPB VG[ RFJLG » BFGZL »I/GF IGF+6 DF8/P
35-50 ml/acre & 40/30 ml/pump Contact and Stomach. Organophosphates group

Mixture Insecticides...

95. Acephate 50% + Imidacloprid 1.8% SP
Lancer Gold (UPL), Stargold (Swal)
✓ R;LIF SJ SFZGL HJFTGF V;ZSFZS IGF+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 work in cotton ±5SF,DF[ HLVJFGF / »JL,FAL / »J[VGV [NSZL / »I/GF IGF+6 DF8/P
80-100 ml/acre, 8-10 ml/pump Contact and translaminar action. Mixture of Anthracine Diamides and Synthetic pyrethroid group insecticide

97. Chlorpyrifos 16% + Alphamethrin 1% EC
Anth Super (KR), Legend Plus (MIL), Chlorthrin (Devidayal), Pincer 115 (Sumil), Aflafool (ILL), Alert (Tropical), Logan (SuperCSL), Zoro (Crystal), Twins (Suiprul Mills), Aaghaat (Bharat)
✓ Effectively controls wide range of sucking as well as chewing pest.
R;LIF SJ SFZGL HJFT GF »I/GF IGF+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
Perfeck 31.5 EC (BioStadt)
✓ Mixture of Organophosphate and Carbamates group insecticide

99. Chlorpyrifos 50% + Cypermethrin 5% EC
Double Star (Swal), Anth (KR), Shergy (MIL), Combo King (KCS), Konanda 505 (TATA), Sac 505 (Shivalik), Hamka 505 (Gharda), Super Strong 505 (Sumil), Lethal Super 505 (ILL), Pradhan (Kilpest), Action 505 (Tropical), Nurocomb (Chemnova), Super 505 (SuperCSL), Catchh (Coromandel), Hii Hunter (HIL), Lynch + Combi (PCCPL), Cannon (Nagarjuna), Ballo (Atul), Ulka 505 (BioStadt), Cyclon (GSP), Panther (Amber), Nagraj 505 (CCIL)
✓ It effectively controls the lepidopteran insects in a wide range of crops.
Its recommended for Aphids, Jassids, Thrips, White fly, American Bollworm, Spotted Bollworm, Pink Bollworm and Spodoptera litura of Cotton.
R;LIF SJ SFZGL HJFT GF »I/GF IGF+6 DF8/P
35-40 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% + Quinalfos 20% EC
Viraat (UPL), Alert (Devidayal)
✓ Bollworms, Other Caterpillars, Fruit & Shoot Borer in cotton, vegetables
35-500 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 Flubenda 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 is lay sterile eggs.
35-40 ml/acre Contact & Stomach

102. Deltamethrin 1% + Triazophos 35% EC
Tiger (KR), Tuzo Super (MIL), Tricada (Sumil), Combi DT (Devidayal), Shark (ILL), Shock (Kilpest), Tridelta (Tropical), Delfosse (Advance), Fusion (Suiprul Mills), Scoop (Willowood), Anaconda Plus (CCIL)
✓ »OGFXS R;LIF SJ SFZGL HJFT GF »I/GF RM8 IGF+6 DF8/P
35-40 ml/acre Contact & Stomach

103. Ethon 40% + Cypermethrin 5% EC
Nagata (TATA), Collof (P Ind.), Jashin (KR), Mitplus (Swal), Mit Plus (Swal), Cyprotex (MIL), Eagle 405 (Devidayal), Rim Jhim (ILL), Sumite-405 (SuperCSL)
✓ Effectively controls wide range of pest’s viz., Heliothis, spotted bollworm & pink bollworm in cotton. It is also effective against whistles on cotton and vegetables.
IUW SJ SFZGL »I/M4 Y[1L% T/ »HG SYLZL2 »ONDFBLG V;ZSFZS IGF+6 DF8/P
35-400 ml/acre 35-40 ml/pump Broad spectrum contact, & stomach action with acaridal effects

104. Imidachloprid 19.81% + Beta-cyfluthrin 4.9% OD
Soloan (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. Imidacloprid 40% + Ethiprole 40% WG
Glamore (Bayer)
✓ Brown plant hopper, white backed plant hopper in rice
It is a very good tool for hopper management thereby avoiding possible of hopper burn in the later crop stages. The

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### FUNGICIDES / BACTERICIDES

<table>
<thead>
<tr>
<th>Technical</th>
<th>Brand Name</th>
<th>Application</th>
<th>Dose / Acre</th>
<th>Mode of Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Azoxystrobine 23% SC</td>
<td>Amistar (Syngenta), Meerador (Adama), Azogro (Coromandel)</td>
<td>Control on more than 400 type fungi</td>
<td>15 ml/pump</td>
</tr>
<tr>
<td>2.</td>
<td>Benomyl 50% WP</td>
<td>Benofit (Coromandel), Kriken (KR), Cure (Tropical), Bentech (Advance)</td>
<td>Soil borne diseases</td>
<td>✓</td>
</tr>
<tr>
<td>3.</td>
<td>Captan 50% WP</td>
<td>Captan (KR), Captan (Devidayal), Captaf (TATA), Captra (Indofil), Kaptan (Tropical), Acmeac (ACME)</td>
<td>It is ideally suited to control diseases like Scab, Brown rot, Damping off, Downy Mildew, Fruit rot, Clump rot, various Leaf - spots including Tika disease, Early and Late Blights and Dry root rot diseases effectively.</td>
<td>3 gm/kg seed for seed treatment</td>
</tr>
<tr>
<td>5.</td>
<td>Carbendazim 46.27% SC</td>
<td>Pearl (Sulphur Mills), Prosper 444 (Sumil), Nakshatra (PCCPL), Halloween (Canary), Witzum SC (Willowood), Deepit (Amber)</td>
<td>Powdery mildew of grapes and mango</td>
<td>20-25 ml/pump &amp; 500 ml for soil drenching</td>
</tr>
<tr>
<td>6.</td>
<td>Carbendazim 50% WP</td>
<td>Bavistin (BAF), Kwistin (KR), Starbenz (Swil), Bengurund (Dow), Milstyn (ML), Devistin (Devidayal), Camry 767 (Sumil), Vistine (Vimax), Benfill (Indofil), Dhanruzin (Dhanuka), Crop Care (NAQ), Sahara (III), Miflun (Kilpest), Tagstlin (Tropical), Carzin-50 (Chemnova), Superstein (SuperCSL), Sten (Coromandel), Hilzin-50 (HIL), Adzim (Advance), Carben (Sulphur Mills), Tiara (PCCPL), Minho (Atul), Bavistin 50DF (BiovStadt), Witzum (Willowood), Spilder (Amber), Goldstain (CCIL), Falak (AOL), Acrneslin (ACME)</td>
<td>OYUL YTF ZMUMGF IG(\times)6 DF8/P</td>
<td>30-35 gm/pump</td>
</tr>
<tr>
<td>7.</td>
<td>Chlorothalonil 75% WP</td>
<td>Kavach (Syngenta), Jatayu (Coromandel), K-nil (KR), Isahaan 75 WP (TATA), Willonyl (Willowood), Pittho (Amber), Dolphin (ACME)</td>
<td>Recommended for Downy mildew, Anthracnose, Early blight, Late blight, Leaf spots, Damping off, etc. in Grapes, Potato, Chillies, Banana, Tomato, etc.</td>
<td>25-30 gm/pump</td>
</tr>
<tr>
<td>8.</td>
<td>Copper Hydroxide 77% WP</td>
<td>Kocide 101 (DuPont), Hi-Dice 77% WP (Dhanuka)</td>
<td>-</td>
<td>✓</td>
</tr>
<tr>
<td>9.</td>
<td>Copper Oxychloride 50% WDG</td>
<td>Topgun DF (Sulphur Mills), Bluejet 727 (Sumil), Acmecon WDG (ACME)</td>
<td>As per above</td>
<td>400 gm/acre</td>
</tr>
<tr>
<td>Product Name</td>
<td>Brand Name</td>
<td>Use</td>
<td>Rate</td>
<td></td>
</tr>
<tr>
<td>--------------</td>
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<td></td>
</tr>
<tr>
<td>Blue Copper (Syngenta)</td>
<td>Biltiox (TATA)</td>
<td>Used for the control Root rot diseases</td>
<td>500-700 gmlandacre</td>
<td></td>
</tr>
<tr>
<td>Copper oxychloride 50% WP</td>
<td>Trust (KR), Cuprina (Pl Ind.), Devicopper (Devidayal), Copper-S (Safeks), Trucop (Indoffi), Dhanucop (Dhanuka), Crop Cap (NACL), Blue-Vit (Kilpest), Tagcop (Tropical), Sudo-Copper (SuperCSL), Blyton (Crystal), Hicopper (Hill), Bellgot 50 WP (Yessell), Coper (Canary), Riva &amp; Gold Copper-50 (CCIL), Acmezoom WP (ACME)</td>
<td>For the control of wilt of cumin</td>
<td>10 ml/pump</td>
<td></td>
</tr>
<tr>
<td>Difenoconazole 25% EC</td>
<td>Score (Syngenta), Karara (KR), Debit (Indoffi), Indream (BioStad)</td>
<td>For the control of wilt of cumin</td>
<td>10 ml/pump</td>
<td></td>
</tr>
<tr>
<td>Difenoconazole 3% FS</td>
<td>Dividend (Syngenta)</td>
<td>For the control of wilt of cumin</td>
<td>10 ml/pump</td>
<td></td>
</tr>
<tr>
<td>Dinocap 48% EC</td>
<td>Karathane (Dow)</td>
<td>For the control of wilt of cumin</td>
<td>10 ml/pump</td>
<td></td>
</tr>
<tr>
<td>Difodine 6.5% WP</td>
<td>Noor (Indoffi)</td>
<td>For the control of wilt of cumin</td>
<td>10 ml/pump</td>
<td></td>
</tr>
<tr>
<td>Fenazaquin 48% EC</td>
<td>Kilpest M (KCS), Dhanuka M (Coromandel), Crythane M (UPL), Devidayal M (DuPont), Dithane M (Tata), Hydroman (Sulphur Mills), Ergon (UPL)</td>
<td>For the control of wilt of cumin</td>
<td>10 ml/pump</td>
<td></td>
</tr>
<tr>
<td>Flusilazole 40% EC</td>
<td>Nustar (DuPont), Cursor (Dhanuka)</td>
<td>For the control of wilt of cumin</td>
<td>10 ml/pump</td>
<td></td>
</tr>
<tr>
<td>Fosetyl AL 80% WP</td>
<td>Aliette (Bayer)</td>
<td>For the control of wilt of cumin</td>
<td>10 ml/pump</td>
<td></td>
</tr>
<tr>
<td>Hexaconazole 2% SC</td>
<td>Samarth 2SC (TATA)</td>
<td>For the control of wilt of cumin</td>
<td>10 ml/pump</td>
<td></td>
</tr>
<tr>
<td>Hexaconazole 5% EC</td>
<td>Contaf (TATA), Hexostar (Swal), Hexzol (Excel), Conquer (UPL), Force (Devidayal), Total (Indoffi), Ole Ole 601 (Sumil), Sitara (Indoffi), Hexadhan (Dhanuka), Avone (ILL), Kiltaf (Kilpest), Hexacon (Tropical), Danzole (Cheminova), Super Hexa (SuperCSL), Corazol EC (Coromandel), Hiltzole (Hill), Hexafine (Advance), Hexamax (Sulphur Mills), Xantho (Atul), Trigger (BioStad), Glory EC (Canary), Alert (GSP), Acmezoom EC (ACME)</td>
<td>For the control of wilt of cumin</td>
<td>10 ml/pump</td>
<td></td>
</tr>
<tr>
<td>Hexaconazole 5% SC</td>
<td>Contaf Plus (TATA), Krizol 5 SC (KR), Koxostar Plus (Swal), Force Plus (Devidayal), Vintaf (Vimax), Hexzol Gold (Excel), Premier 999 (Sumil), Sitara Plus (Indoffi), Avone Plus (ILL), Hexacon Super (Tropical), Danzole Plus (Chemimova), Super Hexa Plus (SuperCSL), Cryzol (Crystal), Corazol SC (Coromandel), Flomax (Sulphur Mills), Remo (PCCPL), Mass Pus (Nagarjuna), Xantho Premium (Atul), Trigger Pro (BioStad), Glory EC (Canary), Harmony (Willwood), Alert Plus (GSP), Perfect (Amber), Hexcon (CCL), Acmezoom SC (ACME)</td>
<td>For the control of wilt of cumin</td>
<td>10 ml/pump</td>
<td></td>
</tr>
<tr>
<td>Iprobenfos 48% EC</td>
<td>Tagid (Tropical)</td>
<td>For the control of wilt of cumin</td>
<td>10 ml/pump</td>
<td></td>
</tr>
<tr>
<td>Isoprothiolane 40% EC</td>
<td>Fujione (TATA), Blaster (ILL), Rhizo (Atul), Fuzuki (Amber)</td>
<td>For the control of wilt of cumin</td>
<td>10 ml/pump</td>
<td></td>
</tr>
<tr>
<td>Kasugamycin 3% SL</td>
<td>Kasu-B (Dhanuka), Biomycon/Mycon (BioStad)</td>
<td>For the control of wilt of cumin</td>
<td>10 ml/pump</td>
<td></td>
</tr>
<tr>
<td>Kitzan 48% EC</td>
<td>Kitzan (Pl Ind.)</td>
<td>For the control of wilt of cumin</td>
<td>10 ml/pump</td>
<td></td>
</tr>
<tr>
<td>Kresoxim Methyl 44.3% SC</td>
<td>Ergon (TATA)</td>
<td>For the control of wilt of cumin</td>
<td>10 ml/pump</td>
<td></td>
</tr>
<tr>
<td>Mancozeb 35% SC</td>
<td>Hydroman (Sulphur Mills), Viva (Sumil), Eurofil NT – 35 SC (Indoffi), Acmezoom 35 (ACME)</td>
<td>For the control of wilt of cumin</td>
<td>10 ml/pump</td>
<td></td>
</tr>
<tr>
<td>Mancozeb 75% WP</td>
<td>Dithane M-45 (Dow), Indoffi M-45 (Indoffi) &amp; Manil 75 WG (Indoffi), Tata M-45 (TATA), Rasayan M-45 (KR), Stargem-45 (Swal), Uthane M-45 (UPL), Devidayal M-45 (Devidayal), Pluto M-45 (Sumil), Marklett (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), Zinthope M-45 (Tropical), Super M-45 (SuperCSL), Crystal M-45 (Crystal), Hillzume M-45 (HILL), Ad-45 (Advance), Hyzeb M-45 (HCL), Veera (PCCPL), Sparsh (BioStad), Erthamine (Sabero), Mover</td>
<td>For the control of wilt of cumin</td>
<td>10 ml/pump</td>
<td></td>
</tr>
</tbody>
</table>
29. **Manipropamid 23.4% SC**
   - **Revus (Syngenta)**
   - **Used for** seed treatment in groundnut for the control of collar rot & leaf spot
   - **Dosage:** 120 ml/acre 12 ml/pump
   - **Duration:** 3-6 gm/kg seed for seed treatment & 15 gm/pump

30. **Metalaxyl 35% WS**
   - **Glazer (TATA), Krlaxyl 35 (KR), Metalexyl (MIL), Krlaxyl (KR), Rampart (UPL), Galaxy (Devidayal), Himil Plus (IL), Tagron (Tropical), Matrix (Advance), Mask (HCL), Pometal (PCCPL), Metal (GSP), Acmeexyl (ACME)**
   - **It is used for** protection from pre and post emergent seedling blights and fungal seed rots in Maize, Bajra, Songhum & Sunflower.
   - **Dosage:** 15-20 gm/pump
   - **Systemic, protective & curative action. Belongs from Phenylamides (Acylalanine) group

31. **Metiram 70% WG**
   - **Pack Up (KR), Tagventure (Tropical),**
   - **Dosage:** 1 ltr/60 bag tuber treatment
   - **Non-systemic, Contact fungicide. Phenylineas group Fungicide

32. **Microbutanil 10% WP**
   - **Fit (KR), Systhane (Dow), Boon (Indoff), Mybil (Sumil), Index (Nagarjuna), Cygnnet (BioStadt)**
   - **Dosage:** 80-100 ml/acre & 8-10 ml/pump
   - **Systemic foliar fungicide with protective and curative action, with translocation acropetally in the xylem. Triazoles group

33. **Pencycuron 22.9% SC**
   - **Monceren (Bayer)**
   - **Dosage:** 3-6 gm/kg seed for seed treatment & 15 gm/pump
   - **Systemic, protective & curative action. Belongs from Dithiocarbamate group.

34. **Propiconazole 25% EC**
   - **Tilt (Syngenta), Win (KR), Tde (MIL), Propi (Devidayal), Picona 250 (Sumil), Dhan (Indoff), Zerox (Dhanuka), Sona (ILL), Tagol (Tropical), Super Propi (SuperCSL), Built (Crystal), Propicon (Coromandel), Propik (Sulphur Mills), Result (Nagarjuna), Abu (Atul), Cosmos (Canyari), Phylum (Willowood), Final (GSP), Joel (Amber)**
   - **Dosage:** 1 ltr/60 bag tuber treatment
   - **Non-systemic, Contact fungicide. Phenylineas group Fungicide

35. **Propineb 70% WP**
   - **Antracol (Bayer), Scale (KR), Devintrac (Devidayal), Aarosh (Coromandel), Enviro (Amber)**
   - **Dosage:** 3-6 gm/kg seed for seed treatment & 15 gm/pump
   - **Multi-site contact activity. Belongs from Dithiocarbamate group.

36. **Pyraclostrobin 20% WG**
   - **Headline WG (BASF)**
   - **Dosage:** 400 gm/acre 40 gm/pump
   - **Systemic fungicide, acaricide give nutrition to plant. Inorganic group

37. **Sulphur 40% SC**
   - **Share (Indoff), Grafit (Crystal), Kidrat Plus (Amber)**
   - **Dosage:** 80-200 ml
   - **Contact action. Inorganic group

38. **Sulphur 55.16% SC**
   - **Magic (Devidayal), Flosal 800 (Sumil), Nansulf (PCCPL)**
   - **Dosage:** 80-200 ml
   - **Contact action. Inorganic group

39. **Sulphur 80% WDG**
   - **Cosavet DF (Sulphur Mills), Cosamif DF (Sumil), Prahar (Klipetst), Nanthion DF (PCCPL), Su-Sulphur (SuperCSL), Vilo (Atul), Innovet & Wokovit (BioStadt), Sulphur (Canyari), Wilsulf (Willowood), Kudrat (Amber), Solar DF (CCIL), Acmesulf WDG (ACME)**
   - **Dosage:** 80-200 ml
   - **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 (Vimat), Sulfil (Indoff), Sulfan Plus (ILL), Tagol (Tropical), Sulfon (Advancne), Insulf (UPL), Devisulphur (Devidayal), Sulfal (TATA), Prahar (Klipetst), Kingsulf (KGS), Acmesulf WP (ACME)**
   - **Dosage:** 80-200 ml
   - **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)**
   - **Dosage:** speed up the chlorophyll and amino acid formation, improves the soil pH

42. **Sulphur 90% WDG**
   - **Cosavet Fertis (Sulphur Mills), Cosamif Gold (Sumil), Feddit-WG (CCIL)**
   - **Dosage:** speed up the chlorophyll and amino acid formation, improves the soil pH

43. **Tebuconazole 2% DS**
   - **Raxil (Bayer), Dixoy (Amber)**
   - **Dosage:** speed up the chlorophyll and amino acid formation, improves the soil pH

44. **Tebuconazole 5.36% FS**
   - **Raxil Easy (Bayer)**
   - **Dosage:** speed up the chlorophyll and amino acid formation, improves the soil pH

45. **Tebuconazole 25.9% EC**
   - **Folicur (Bayer), Kure (KR), Triblast (Excel), Devikure (Devidayal), Dixure (Amber)**
   - **Dosage:** speed up the chlorophyll and amino acid formation, improves the soil pH

46. **Tetraconazole 3.8% EW**
   - **Domark (Isagro Asia)**
   - **Dosage:** speed up the chlorophyll and amino acid formation, improves the soil pH

47. **Thifluazamide 24% SC**
   - **Pulsor (ILL)**
   - **Dosage:** speed up the chlorophyll and amino acid formation, improves the soil pH
48. Thiophanate Methyl 70% WP
Thiovit (Syngenta), Roko & Intop (BioStadt), Key (KR), Mitop (MIL), Devilock (Devililag), Fungo (Safex), Brando 747 – 75% WP (Sumil), Prism (III), Tagen-M (Tropical), Hexastop (Coramandel), Control (Sulphur Mills), Tamboora (Canary), Theme (Willwood), Acmetop (ACME)

- OJUYL YTF ZMUUMGF IG1(6 DF8P
- 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
Kraton (KR), Tagton (Tropical), Triguard (Advance)

- 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

51. Tricyclazole 75% WP
Gain (Syngenta), Beam (Dow), Tric (KR), Tristar (Swali), Profit (MIL), Logik (P.I Ind.), Samar (UPL), Mantis (TATA), Triole 737 (Sumil), Baan & Baan Gold 75WG (Indoff), Dhan Team (Dhanuka), Force 11 (III), Blast (Kilpest), Tagteem (Tropical), Blast Off (Cheminova), Suzole (SuperCCL), Trizole (Crystal), Agni (Coramandel), Hilibast (HILL), Blaster (Sulphur Mills), Yodha (PCCPL), Sivic (Nagarjuna), Oryzae (Atul), Blastin (BioStadt), Lallari (Canary), Wiltrix (Willwood), Stanza (GSP), Lakshay (Amber), Acmetric (PCCPL)

- Anti-biotic and anti-fungal
- EJLTFZM4 VFUTMTZM ;SFZM4 Ly α > 84 SF/F RF8FGM ZMU4 U,T VFjhlM VF AWF ZMUMGF V;ZSFZ5 IG1(6 DF8P
- 35-40 ml/pump
- Anti-biotic and anti-fungal, Systemic bactericide and fungicide

52. Validamycin 3% SL
Valida (Sumitomo), V3 (KR), Verito (Sumil), Sheethmar (Dhanuka), Tagmar 20-20 (Tropical), Pollien (Atul), Falak (Amber), Valine (CCCL)

- Anti-biotic and anti-fungal
- EJLTFZM4 VFUTMTZM ;SFZM4 Ly α > 84 SF/F RF8FGM ZMU4 U,T VFjhlM VF AWF ZMUMGF V;ZSFZ5 IG1(6 DF8P
- 20-20 ml/pump
- Anti-biotic and anti-fungal, Systemic bactericide and fungicide

53. Zineb 75% WP
Indoff Z-78 (Indoff)

- 400 gm/acre
- 40 gm/pump
- Dithiocarbamate group

54. Ziram 27% SC
Cumul L (Syngenta), Crop Ziram 27% EC (NACL), Star 27 (CCCL), 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 (Indoff), Serobact (Swali), Bactrimil (IL), Bionol 100 (Tropical), Bactrinash (K.S Agrochemicals), X-tra (Sulphur Mills), Bactinol (Bharat)

- Anti-bacterial or anti-biotic, ImmunoModulator
- Anti-bacterial

57. Azoxyostrobin 11% + Tebuconazole 18.30% SC
Custodia (Adama)

- Susceptible concentrate fungicide for effective control of fruit rot, die-back and powdery mildew in chill crop
- Susceptible concentrate fungicide. Mixture of Methoxy acrylate and Triazole group

58. Azoxyostrobin 18.2% + Difenconazole 11.4% SC
Amistar Top (Syngenta)

- Sheath blight, dirty panicle. OJUhgl 56°F3 in rice
- Yello rust, powdery mildew in wheat
- Systemic fungicide. Mixture of Methoxy acrylate and Triazole group fungicide

59. Captan 70% + Hexaconazole 5% WP
Taqt (TATA), Kick (KR), Super Suraksha (SuperCSL), Arjan (Amber), Power (CCCL)

- Controls most of the diseases in most of the crops like fruits, vegetables & cotton crops.
- Controls most of the diseases in most of the crops like fruits, vegetables & cotton crops. RZD54 EJLTFZM4 ;SFZM4 VFUTMTZM ;SFZM4 5FJ64 U1(4 RUSF54 G;OM565GM ;OM4 VF JUJW ZMUMGF,FYAF;DI;JWLG;I5+6 DF8P
- 25 gm/pump
- Contact and systemic Fungicide. Mixture of Heterocyclic nitrogen (Pthalimidine) and Triazoles group fungicide

60. Carbendazim 12% + Mancozeb 63% WP
Saaf (UPL), Sicer (Dhanuka), CM-75 (KR), Turf (Swali), Team (MIL), Maczim (Devililag), KingSaft (KCS), Maxiclean (Vimax), Companion (Indoff), Care (III), Pearl (Kilpest), Revive 750 (Tropical), Super Safe (SuperCCL), Sure (Crystal), Kaperi (Coramandel), Faslo (Advance), Top Too (HCL), Siain (GKR), Drsma (PCCPL), Combi Pus (Nagarjuna), Riper (Atul), Bendaco (BioStadt), Carman (Canary), Carmel (Willwood), Amrit (Amber), Performer (ACME)

- KM0G5 OJUhgl ZMUYL ARPJF DFB[ T[DH T][GF IG1(6 DF8P
- 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)

- To control 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.
- To control 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
- 2 to 3 gm/kg for seed treatment
- Systemic & contact action. Mixture of Oxathiin Carboxamides and Dithiocarbamate group fungicide

62. Carboxin 37.5% + Thiram 37.5% WP
Vitavax Power (Dhanuka)

- To control 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.
- To control 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. 30 ml/pump 300 ml/acre
- Systemic & contact action. Mixture of Oxathiin Carboxamides and Dithiocarbamate group fungicide

63. Cymoxanil 8% + Mancozeb 64% WP
Curzate (DuPont), Maximate (Indoff), Quarate Gold (Dhanuka), Crizol (Tropical), Partner (Crystal), Layby (Willwood)

- It is a Specialist Downy Mildew fungicide for Grape.
- 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 fungicide

64. Dimethomorph 0.00% + Ametoctradin 0.00% SC
Blend SC (TATA)

- Specially for downy mildew of grape
- Specially for downy mildew of grape. 2 ml / ltr.
- Mixture of Cinnamic acid derivative and ...... group fungicide
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.
<table>
<thead>
<tr>
<th>No.</th>
<th>Chemical Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>2,4-D Amine Salt 58% WSC &amp; SL</td>
<td>Kay-n (KR), Safaya 720 (Devidayal), Aura 58 SL (ML), Weedoo Super (Excell), Twister (ILL), Eraser (Kilpest), Weedmar Super (Dhanuka), Weedor (Crystal), Zura (Atul), Capture (Canary), Willimine (Willowood)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>✓ Annual Mustard, Thistle, Dandelion, Control Aquatic Weed in Lakes &amp; Ponds, Ragweed, Lamb's Quarters</td>
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<tr>
<td></td>
<td></td>
<td>✓ Apart from effectively control broad leaf weeds. These also control the Cyperus sp.</td>
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<td></td>
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<td>✓ There is no adverse effect on crops with recommended dose.</td>
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<tr>
<td></td>
<td></td>
<td>✓ Cyperus, Tribus (Gojth), Triantemha celosia, Euphorbia (Badi Doodhi), Phyllanthus in sorghum</td>
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<td></td>
<td></td>
<td>150-200 ml/pump</td>
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<td></td>
<td></td>
<td>Selective and Systemic herbicide of Phenoxycetic group. Salts are readily absorbed by the roots, whilst esters are readily absorbed by foliage. Acts as a growth inhibitor.</td>
</tr>
<tr>
<td>2.</td>
<td>2,4-D Ethyl Easter 38% EC</td>
<td>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)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>3.</td>
<td>2,4-D Ethyl Easter 20% WP</td>
<td>Electron 200 (Devidayal), Zura 22.5 SL (Atul)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>4.</td>
<td>2,4-D Sodium Salt 80% WP</td>
<td>Fermoxone (Syngenta), Kay-D (KR), Weedstar (Swal), Safaya 80 (Devidayal), Doel (Excell), Superhit (ILL), Kilharb (Tropical), Saix (Atul), Fighter 80 (CCIL), Kissan 80 (AOL)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>✓ Annual Mustard, Thistle, Dandelion, Control Aquatic Weed in Lakes &amp; Ponds, Ragweed, Lamb's Quarters</td>
</tr>
<tr>
<td></td>
<td></td>
<td>100 gm/pump</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Action like indole acetic acid (synthetic auxins)</td>
</tr>
<tr>
<td>5.</td>
<td>Anilophos 30% EC</td>
<td>Army (ILL)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>6.</td>
<td>Atrazine 50% WP</td>
<td>Milzine 50 (MIL), Atrataf (TATA), Rasayanzine (KR), Atrastar (Swal), Attack (Devidayal), Solario (PI Ind.), Atraclor (Excell), Attack (Devidayal), Summat (Sumil), Zinguard (Gharda), Traxx (Shivalik), Atraf (Indofil), Dhanuzine (Dhanuka), Strike (ILL), Chapef (Kilpest), Tagtaf (Tropical), Srizon (Crystal), Atrafine (Advance), Atrasul (Sulphur Mills), Citra (PCCPL), Dhwanshi (BioStadt), Polar (Canary), Atro (Amber), Atragold (CCIL), Umbra 50 (AOL)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>✓ Used for the control of annual grasses and broad lefted 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.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>100-150 gm/acre</td>
</tr>
<tr>
<td></td>
<td></td>
<td>It is a Translocated Pre-emergence Herbicide. Selective triazine herbicide. It belongs to the Triazine class.</td>
</tr>
<tr>
<td>7.</td>
<td>Azimsulfuron 50% DF</td>
<td>Segment (DuPont)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>✓ For control of weeds in Rice crop viz., Echinochloa crusgata, E. colonum, Ischaemum rugosum, Cyperus difformis, C. iria, Fimbrystylis milliacea, Eclipta alba, Ludwigia parviflora, Monochoria, Vagilarius, Alternaria, Philoxeroids, Spinacea zeylanica</td>
</tr>
<tr>
<td></td>
<td></td>
<td>New generation broad spectrum post emergent herbicide, selective and systemic. It gets foliage and roots</td>
</tr>
<tr>
<td>8.</td>
<td>Bispyribac Sodium 10% SC</td>
<td>Macho (Syngenta), Adora (Bayer), Nominee Gold (PI Ind.)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>9.</td>
<td>Butachlor 50% EC/EW</td>
<td>Rasayanchlor (KR), Milch 50EC, Millfast 50EW (ILL), Baaz 50E (Kilpest), Thunder (Tropical), Supchlor (SuperCSL), Bumper (Crystal), Hiltaklor (HIL), Kikout (Sulphur Mills), Iro (Atul), Hal Mix (Amber), Chemchlor (CCIL), Demand 50 (AOL)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>10.</td>
<td>Butachlor 5% GR</td>
<td>Milchlor 5G (ILL), Baaz 5G (Kilpest), Thunder 5G (Tropical)</td>
</tr>
<tr>
<td>11.</td>
<td>Carfentrazone Ethyl 40% DF</td>
<td>Nabood (Dhanuka)</td>
</tr>
<tr>
<td>12.</td>
<td>Chlorimuron Ethyl 25% WG</td>
<td>Kloen (DuPont), Qurin (Dhanuka), Trick 25 WP (ILL), Cyno (Atul)</td>
</tr>
<tr>
<td>13.</td>
<td>Clodinafop Propargyl 15% WP (Piroxofop-propargyl)</td>
<td>Topik (Syngenta), Lucifer (Bayer), Chopper (DuPont), Topik (KR), Topple (Swal), Milwin (MIL), Vidhanshan (Excel), Jhatka (UPL), Devicid (Devidayal), Viola 150 (Sumil), Dynofop (Dhanuka), Omega (ILL), Dion (Tropical), Rakshak Plus (Cheminova), Avtaar (Crystal), Skipper (Coromandel), Hilipik (HIL), Razor (Advance), Action (Sulphur Mills), Ohm (PCCPL), Point (Nagarjunia), Vitis (Atul), Maachis (BioStadt), Willop (Willowood), Compact (Amber), Fargo (AOL)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>✓ 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.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>160 gm/acre</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Selective, Post-emergence. It works effectively even when the climate is foggy or cloudy. It also doesn't get washed away if it rains.</td>
</tr>
<tr>
<td>14.</td>
<td>Cyhalofop Butyl 10% EC</td>
<td>Clincher (Dow)</td>
</tr>
<tr>
<td>15.</td>
<td>Diuron 80% WP</td>
<td>Daron (Tropical)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>16.</td>
<td>Ethoxyoxuron 15% WDG</td>
<td>Sunrice (Bayer)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>✓ Very effective for the control of sedges and broadleaf weeds in transplanted Rice</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Post-emergent broad spectrum herbicide</td>
</tr>
<tr>
<td>17.</td>
<td>Fenoxaprop-P-Ethyl 6.7% EC</td>
<td>Ricestar (Bayer)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>✓ Recommended for the control of grassy weeds, especially Echinochloa spp. In direct seeded and transplanted Rice.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Selective, Post-emergence herbicide</td>
</tr>
<tr>
<td>18.</td>
<td>Fenoxaprop-P-Ethyl 9.3% EC</td>
<td>Whipsuper (Bayer), Naaka Super (KR), Devislash (Devidayal), Wego Super (ILL), Melma (Atul), Finoxa (Amber)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>✓ It having action against Echinochloa spp. &amp; other grassy weeds in Soybean, Rice, Cotton, Black Gram &amp; Onion</td>
</tr>
<tr>
<td></td>
<td></td>
<td>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</td>
</tr>
<tr>
<td>19.</td>
<td>Fluazifop-P-Butyl 13.4% EC</td>
<td>Fusilade Max (Syngenta)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>✓ Total grasses in groundnut and tomato</td>
</tr>
<tr>
<td>20.</td>
<td>Glufosinate Ammonium 15% SL</td>
<td>Basta (Bayer)</td>
</tr>
<tr>
<td>22.</td>
<td>Glyphosate 41% SL Iso-propyl-amine (IPA) Salt</td>
<td>Round Up (Monsanto), Allkll (KR), Dryphosphate (Swa), Weedall (Dow), Glycy (Excel), Milisate (MIL), Sweep (UPL), Pi Glypho (Pl Ind.), Gladiator 41 (Devidayal), Glycare (Vimax), Glyfar (TATA), Khatnam SL (Sumni), Clean Up (Indofi), Noweed (Dhanuka), Crop Glypho (NACL), Hijack (ILL), Glyphokil (Kilpest), Safal (Tropical), Gyflos (Cheminova), Superkill (CSSL), Clonton (Crystal), Glycor (Coromandel), Trimmashi (HIL), Gymax (Advance), Glyyesell (Yesell), Vinash (Sulphur Mills), Veto (PCCPL), Coneo (Atul), Brake (BioStadt), Teetar (Canary), Willosate (Willwood), Darban (Amber), Lagaam (AOL)</td>
</tr>
<tr>
<td>24.</td>
<td>Glyphosate 71% SG Ammonium Salt</td>
<td>Allkll 71 (KR), Star 71 (Swa), Mera 71 (Excel), Gladiator 71 (Devidayal), Milisate 71 (MIL), GlyGran (Sumil), Flite 71 (ILL), Dera (Dhanuka), Safal 71 (Tropical), Dakar (Cheminova), Superkil (CSSL), Topper-77 (Crystal), Killshot (Coromandel), Vinash Power (Sulphur Mills), Veto Plus (PCCPL), Coneo 71 (Atul), Brake-G (BioStadt), Willosate 71 (Willwood), Aandhi (Bharat)</td>
</tr>
<tr>
<td>25.</td>
<td>Imazethapyr 10% SL</td>
<td>Solitude (Bayer), Perfect (KR), Spur (Swa), Inno (Pl Ind.), Sugam (Excel), Devisait (Devidayal), Sumiza (Sumil), Selecor (ILL), Tagpyr (Tropical), Dinamiz (Cheminova), Guard (Crystal), Fervent (Coromandel), Imasul (Sulphur Mills), Patriot (Willwood), Square Cut (Amber)</td>
</tr>
<tr>
<td>26.</td>
<td>Isoproturon 75% WP</td>
<td>Isoguard (Gharden), Miron (ILL), Comando 75WP (Kilpest), Wonder (Tropical), Hilproturon 50 &amp; 75 WP (HIL), Achieve (CCIL), Avalanche 75 (AOL)</td>
</tr>
<tr>
<td>27.</td>
<td>Metribuzine 70% WP</td>
<td>Tata Metri (TATA), Sencor (Bayer), Krizin (KR), Metrimil 70 (MIL), Metrex (Excel), Encore (Devidayal), Sumeti (Sumil), Barrier (Dhanuka), Anchor (ILL), Dezine (Tropical), Sricon (Crystal), Grometi (Coromandel), Merite (Sulphur Mills), I-Max (Nagarjuna), Afford (Canary), Willord (Willwood), Verdict (GSP), Oyster (Amber), Raptor 70 (AOL)</td>
</tr>
<tr>
<td>28.</td>
<td>Metsulfuron Methyl 20% WG / WP</td>
<td>Aligro WG (DuPont), Melstar (Swa), MM-20 (MIL), Metso (UPL), Hook 20 WG (Dhanuka), Weed Grip (ILL), Kill Grip (Kilpest), Tagtrip (Tropical), Metcil M (Cheminova), Sulgrip (CSSL), Algo (Crystal), Mitsu (Advance), Siege (PCCPL), Conv (Atul), SMS (Willwood), Bigtrip (Bharat), Fuse (AOL)</td>
</tr>
<tr>
<td>29.</td>
<td>Oxadiaryl 6% EC</td>
<td>Raft (Bayer)</td>
</tr>
<tr>
<td>30.</td>
<td>Oxadiaryl 80% WP</td>
<td>Topstar (Bayer)</td>
</tr>
<tr>
<td>31.</td>
<td>Oxfluorfen 23.5% EC</td>
<td>Vinash (Advance), Goal (Dow), Oxygld (Indofi), Oncho (TATA), Kroll (Oyster), Devidayal (Darcon), Zargon (Dhanuka), Orbit (ILL), Tag Glove (Tropical), Ronaldo (Crystal), Wada (hmp), Ingol (BioStadt), Oxysguard (Willwood)</td>
</tr>
<tr>
<td>32.</td>
<td>Paraquat Dichloride 24% SL</td>
<td>Gramoxone (Syngenta), Kapig (KR), Swat (Swa), Mill-P (Meghamani), Parachute (Devidayal), Swat (Swa), Uniquat (UPL), Para Guard (Gharden), Firestorm (Chemtura), Crezi (Vimax), Paracal (TATA), Ozono (Dhanuka), Milquat (ILL), Tagquilt (Tropical), Super Pera (CSSL), Alquat (Crystal), Weedax (Coromandel), Spyker (Advance), Gramexell (Yesell), Parasac</td>
</tr>
</tbody>
</table>
33. Pendimethaline 30% EC

- Stomp (BASF), Tata Panada (TATA), Dhanutrop (Dhanuka), Kristop (KR), Svalor (Swali), Pendilin (Mil), Excel Plus (Excel), Bunker (P.I Ind.), Despend (Devidayal), Spenta (Sunil), PendiClean (Vinmax), Pemdamil (HII), Stem (Kiprest), Taggendi (Mykora), Pendiherb (Cheminova), Super Penda (SuperCSL), PendiDril (Centoma), Eezikill (Coromandel), Pantac (Advance), Pendosh (Oshnic), Pendistar (HCL), Pendisul (Sulphur Mills), Klean Out (PCPL), Xyris (Uzla), Penda (IPL), Taipan (Canary), Octavia (Willwood), Pendi-flx (GSP), Rapid-X (Amber)

- 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 affected weeds die shortly after germination.

34. Pendimethaline 38.7% CS

- Stomp Xtra (BASF), Pendi Rich (GSP), Panada Grande (TATA), Gardendew (Canary)

- 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 affected weeds die shortly after germination.

35. Penoxsulam 240 SC

- Granite (Dow)

- It controls phalaris which is a key weed of wheat crop

- 350 ml/acre

- Post emergence selective herbicide

36. Pinoxaden 5% EC

- Axial 5.1 (Syngenta), Melsa (P.I Ind.)

- It controls phalaris which is a key weed of wheat crop

- 35 ml/pump

- Post emergence selective herbicide

37. Pretilachlor 50% EC

- Rrif (Syngenta), Prince (KR), Pita (Swali), Merit (Excel), Profit 100% (Devidayal), Etala (Vinmax), Preet (TATA), Fabo (Sunil), Offset (Indoff), Craze (Dhanuka), Racerv (III), Taghit (Tropical), Pretyherb (Cheminova), Super Cut (SuperCSL), Shift (Crystal), Pilot (Coromandel), Hilpreti (HIL), Boxter (Advance), Sureshot (Sulphur Mills), Klean Out (PCPL), Eaze (Nagarjuna), Vinia (Atul), Rimove (BioStadt), Pretla (Canary), Wilfit (Willwood), Ujla (Amber), Prettia (CCIL), Wrap 50 (AOL)

- Recommended for control of grasses, sedges & broad leaved weeds like Echinochloa spp., Cyperus iria, Cyperus difformis, Eleusine indica, Ludwigia fastuosa, Pannicum parviflora, Pannicum repens etc. in planted Rice.

- 500 ml/acre

- Inhibition of cell elongation, nucleic acid and protein synthesis.

38. Pretilachlor 37% EW

- Rrif Plus (Syngenta), Ujla Super (Amber)

- Grasses, sedges and some broad leaf weeds in Rice

- 600 ml/acre

39. Propaquizafop 10% EC

- Society (Indoffi)

- 35 ml/pump

40. Pyrazosulfuron Ethyl 10% WP

- Saathi (IPL)

- Grasses and Broad Leaf Weeds in Paddy

- 80 gm/acre

- Selective, Pre-emergence

41. Pyridobac Sodium 10% EC

- Rife (Cheminova), Nanchaku (BioStadt)

- 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.

42. Pyroxofop Propinyl 15% WP

- Sartaj (TATA)

- 15 ml/acre

43. Quixalofop-P-tefuril 4.41% EC

- Pantera (DuPont)

- 500 ml/acre

- 50 ml/pump

44. Quixalofop Ethyl 5% EC

- Targa Super (Dhanuka), Hakama (ILL), King Super (Swastik)

- All narrow leaf weeds Echinochloa (Sawali), Eleusine (Gosee grass), Wild sorghum, Cyodon (doob grass), Saccharum (kans), Johnson grass, Large crab grass, Volunteer paddy, Jowar, Pharramite, Maize, etc. in Soybean, Cotton, Groundnut, Green gram, Black gram, Sesumum, Jute and all other broad leaf crops and vegetables

- 300-400 ml/acre

- 30-40 ml/pump

- Selective, Pre-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 (Swali), Lallkar (Excel), SF-10 (ULP), Fateh (TATA), Furo 123 (Sulmil), Sultop (Dhanuka), Kaiser / Guru (ILL), Tagstar (Tropical), Somet (Cheminova), Super Sultop (SuperCSL), Arrow (Sulphur Mills), Blanket (PCPL), Loxo (Atul), Avast 10 (AOL)

- Used for the effective control of Phalaris Minor in Wheat crop. It also controls broad-leaved weeds like Chenopodium album, Melilotus albus.

- 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 desiccation.

46. Tembotrione 42% SC

- Laudis (Bayer)

- Recommended for use along with surfactant for control of broad leaf and grassy weeds in corn

- Broad spectrum, pre-emergent herbicide

47. Ciodinafop Propargyl 15% WP + Metsulfuron Methyl 0.06%

- Sandesh (Swali)

- 400 ml/acre

- 40 ml/pump

- Herbicide

48. Fomesafen 11.1% + Fluazifop-p-butyl 11.1% SL

- Fusillex (Syngenta)

- For control of broad and narrow both type of weeds in groundnut and soybean.

- Selective and post-emergent herbicide

49. Imazethapyr 35% + Imazamox 35% WG

- Oddissey (BASF), Adue (Bayer), Bingo (P.I Ind.), Jodii (BioStadt), Pyramox (Coromandel)

- Control of grasses and broadleaves weeds in soybean and groundnut

- 35 ml/pump
1. Alpha Naphthyl Acetic Acid 4.5% SL  
   Pianofix (Bayer), Acimone (Devidayal), Superfix (Indofil), Anmol (IIL), Frutofix (Klipist)  
   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.  
   Dose / Acre: 75 ml / 200 lit. of water  
   Mode of Action: 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), Ashwargra Granules (UPL), Devimino (Devidayal), Toyo (Vimax), Sumino (Sumil), Emerald (Slipur Mills)  
   Induce flowering and fruiting. Reduce flower and fruit drop. Improve fruit size, Quality and color  
   Dose / Acre: 400 ml/acre  
   Mode of Action: Amino acids enriched with plant growth substances and essential trace minerals.

3. Ascophyllum nodosum (Micro-fertilizer)  
   Biovita (Pl Ind.), Agrofert (Sainath Agro)  
   PGR: Used to improve yield & quality of cotton, vegetables, cereals and fruits  
   Dose / Acre: 40 ml/pump  
   Mode of Action: Plant growth regulator with systemic properties. It penetrates into plant tissues and is decomposed to ethylene, which affects the growth processes.

4. Chloromequat Chloride 50% SL  
   Lihocin (BASF), Layer (Willowood)  
   PGR: Used to improve yield & quality of cotton, vegetables, cereals and fruits  
   Dose / Acre: 40 ml/pump  
   Mode of Action: PGR, PGP, Micro-Fertilizer, Bio-Fertilizer etc.

5. Cytokinine enzymes  
   Paushak Super (KR)  
   Used to improve yield & quality of cotton, vegetables, cereals and fruits  
   Dose / Acre: 400 ml/acre  
   Mode of Action: Plant growth regulator with systemic properties. It penetrates into plant tissues and is decomposed to ethylene, which affects the growth processes.

6. Ethephon 39% SL  
   Ethrael (Bayer), Kripon (KR), Ethephon / Deviphon (Devidayal), Taggon 10 & Taggon 39 (Tropical), Ethefol (Indofil), Bison (Canary), Ash (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. NFGDF EFGF J[ZZJ FDF] TYF O / S55J DFB]  
   Dose / Acre: 400 ml/acre  
   Mode of Action: Plant growth regulator with systemic properties. It penetrates into plant tissues and is decomposed to ethylene, which affects the growth processes.

7. Gibbralic Acid Tech  
   Progib (Sumitomo), JaiGibb (KR), Devigib (Devidayal), Jibra (Sumil), Prime (ILL), Tag Gibb (Tropical), CilGibb (Cheminova), Kribb (KR), Crgibb (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  
   Dose / Acre: 2 gm/acre  
   Mode of Action: Plant growth regulator with systemic properties. It penetrates into plant tissues and is decomposed to ethylene, which affects the growth processes.

8. Gibbralic Acid 0.001%  
   Hoshi (Sumitomo), Prime Gold (Pearl), Guru (IPL), Vird (Amber)  
   Increases persistence & Penetration by reducing surface tension & volatilization. Protect wash-off against rain.  
   Dose / Acre: 50 ml/acre  
   Mode of Action: Plant growth regulator with systemic properties. It penetrates into plant tissues and is decomposed to ethylene, which affects the growth processes.

9. Non-ionic Surfactant  
   Sandovit (Syngenta), Devilfix (Devidayal), Wilcon (Willowood), Silky (KR), Filwet (Indofil)  
   Increase persistence & Penetration by reducing surface tension & volatilization. Protect wash-off against rain.  
   Dose / Acre: 5 ml/pump  
   Mode of Action: Plant growth regulator with systemic properties. It penetrates into plant tissues and is decomposed to ethylene, which affects the growth processes.

10. Pectobutrazole 23% SC  
   Cultar (Syngenta), Paclo (IPL), Canstar (Canary)  
   Increase persistence & Penetration by reducing surface tension & volatilization. Protect wash-off against rain.  
   Dose / Acre: 50 ml/acre  
   Mode of Action: Plant growth regulator with systemic properties. It penetrates into plant tissues and is decomposed to ethylene, which affects the growth processes.

11. Sea Weed Extract  
   Hilgrow (HIL), Kri-Kelp & Kri-Gold Super (KR)  
   Increase persistence & Penetration by reducing surface tension & volatilization. Protect wash-off against rain.  
   Dose / Acre: 5 ml/pump  
   Mode of Action: Plant growth regulator with systemic properties. It penetrates into plant tissues and is decomposed to ethylene, which affects the growth processes.

12. Stigmasterol 0.1% + Campesterol 0.05%  
   Brand & Brand GR (Willowood)  
   Increase persistence & Penetration by reducing surface tension & volatilization. Protect wash-off against rain.  
   Dose / Acre: 5 ml/pump  
   Mode of Action: Plant growth regulator with systemic properties. It penetrates into plant tissues and is decomposed to ethylene, which affects the growth processes.

13. Sulphur 90% Bentonite Pesticles  
   DeviJwala (Devidayal)  
   Increase persistence & Penetration by reducing surface tension & volatilization. Protect wash-off against rain.  
   Dose / Acre: 5 ml/pump  
   Mode of Action: Plant growth regulator with systemic properties. It penetrates into plant tissues and is decomposed to ethylene, which affects the growth processes.

14. Tricontanol 0.1% EW  
   Miracle (Cheminova), PC Boom (PCCPL), Flyover 0.1 EW (Willowood), Taru (Amber), Bilsan (Bharat)  
   Increase persistence & Penetration by reducing surface tension & volatilization. Protect wash-off against rain.  
   Dose / Acre: 5 ml/pump  
   Mode of Action: Plant growth regulator with systemic properties. It penetrates into plant tissues and is decomposed to ethylene, which affects the growth processes.

15. Tricontanol 0.05% EC  
   Micratuorm 0.05 EC (Dow), Contanol EC (IPL), Tonic GR (Amber), Agriplan AG (AOL)  
   Increase persistence & Penetration by reducing surface tension & volatilization. Protect wash-off against rain.  
   Dose / Acre: 5 ml/pump  
   Mode of Action: Plant growth regulator with systemic properties. It penetrates into plant tissues and is decomposed to ethylene, which affects the growth processes.

16. Zinc Phosphide 80% WP  
   Ralfree (Swal), Ralot (UPL), Rattle (Devidayal), Ratikl (BioStadt)  
   Nats, Mice. Probably decomposes to phosphine in the stomach and is absorbed both as phosphate and as the phosphide. It has 1.5 to 2.5%  
   Mode of Action: Plant growth regulator with systemic properties. It penetrates into plant tissues and is decomposed to ethylene, which affects the growth processes.
a toxic action on the heart, liver and kidneys. Death occurs from
heart and kidney failure.
**FORMULATION**

<p>| | | |</p>
<table>
<thead>
<tr>
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**ENGLISH NAME**

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