

List of pesticides for use in grapes for control of insect pests, diseases and weeds approved by the CIB of Ministry of Agriculture, Govt. of India, New Delhi under the Insecticides Act 1968*

A. FUNGICIDE

Sl. No.	Name of Pesticide	Formulation	Common name of disease	Dose / ha (g/ml/%)	Waiting period (days)	Status of MRL
1.	Aureofungin	46.15% SP	Downy mildew Anthracnose	0.005%	15	-
2.	Azoxystrobin	23 SC	Downy and Powdery mildew	500 ml	7	0.5 ppm
3.	Benomyl	50 WP	Powdery mildew Anthracnose	150 150	- 7	5.0
4.	Captan	50 WP 75 WP	Downy mildew Downy mildew	2500 1667	- 8	15.0
5.	Carbendazim	50 WP 46.27 SC	Anthracnose Anthracnose	300 0.1%	- 30	5.0
6.	Cymbopogan	20 EC	Downy mildew Powdery mildew	0.45% 0.45%	7 7	-
7.	Cymoxanil	50 WP	Downy mildew	0.24%	15	0.1
8.	Copper Oxychloride	50 WP 50 WG	Downy mildew Downy mildew	2500 0.24%	- 30	20.0
9.	Copper Sulphate	2.62 SC	Downy mildew	1.0 Lit.	3	N.R.
10.	Chlorothalonil	75 WP	Downy mildew, Anthracnose	0.20%	60	
11.	Dinocap	48 EC	Powdery mildew	225	21	0.1
12.	Fosetyl-al	80 WP	Downy mildew	1400-2000	30	10.0
13.	Iprodione	50 WP	Anthracnose	1000-2000	20	10.0
14.	Kitazin	48 EC	Anthracnose	0.2%	10	-
15.	Lime Sulphur	22 SC	Powdery mildew	2-5 Lt.	-	Exempted
16.	Mancozeb	75 WP 35% SC	Downy mildew Anthracnose Angular leafspot	1500-2000	7-12	3.0
17.	Myclobutanil	10 WP	Powdery mildew	0.04%	15	1.0
18.	Penconazole	10 EC	Powdery mildew	50	30	0.2

* The list was obtained from the Plant Protection Advisor to the Govt. of India vide this office letter No. 1(6)/PA/08-09 dated 18.09.2008 through their email letter dated 19th September 2008.

Sl. No.	Name of Pesticide	Formulation	Common name of disease	Dose / ha (g/ml/%)	Waiting period (days)	Status of MRL
19.	Sulphur	40 EC 55.16 SC 80 WP 80 WDG 85 WP	Powdery mildew Powdery mildew Powdery mildew Powdery mildew Powdery mildew	3000 0.3% 2.5-5.0 kg for foliar spray. 15-20 kg for dusting. 3-4gm/ kg seed treatment.	- 10 - - -	Exempted
20.	Triademefon	25 WP	Powdery mildew	0.01%	25	0.5
21.	Zineb	75 WP	Downy mildew	1500-2000	7-14	3.0
22.	Ziram	80 WP 27% Sol.	Downy mildew Anthracnose	1500-2000 3.5 Lt.	7	3.0
23.	Cymoxanil + Mancozeb	8% + 64% WP	Downy mildew	2000	10	Fixed
24.	Metalaxyl + Mancozeb	8% + 64% WP	Downy mildew	2500	49	0.05
25.	Dimethomorph	50 WP	Downy mildew	1000	25	0.05
26.	Propineb	70 WP	Downy mildew	0.3%	40	0.5
27.	Flusilazole	40 EC	Powdery mildew	0.01%	15	
28.	Hexaconazole	5% SC, 5% EC, 2% SC	Powdery mildew Powdery mildew and Downy mildew	500-1000 ml, 1.5-3.0 lit.	14	0.1
29.	Fenamidone + Mancozeb	10% + 50% WDG	Downy mildew	1500 gm	85	0.05

B. INSECTICIDES

Sl. No.	Name of Pesticide	Formulation	Common name of disease	Dose / ha (g/ml/%)	Waiting period (days)	Status of MRL
1.	Carbaryl	50 WP	Chaffer beetles Leaf hopper Thrips	0.15% 0.10% 0.10%	20 15 15	-
2.	Chlorpyrifos	20 EC	Root grub	10 ml / Plant	-	0.5
3.	Dicofol	18.5 EC	Prudenia Caterpillar Thrips	0.1% 465 g	-	5.0
4.	Malathion	50 EC	Beetles	1000 ml/ha	-	4.0
5.	Phosalone	35 EC	Sanjose Scale Leaf miner Mealy bug	0.05% 0.05% 700 gm/ha	-	5.0
6.	Methomyl	40 SP	Mealy bug	1250 gm/ha	10	0.05
7.	Buprofezin	25 SC	Mealy bug	1-1.5 lit./ha	7	0.01

C. **HERBICIDES/PGR**

Sl. No.	Name of Pesticide	Formulation	Common name of disease	Dose / ha (g/ml/%)	Waiting period (days)	Status of MRL
	<u>PGR</u>					
1.	Gibberlic Acid	Tech 0.001%L	For increasing the yield and quality	100 ppm 180 ml	- -	N.F.
2.	Hydrogen cyanamide	49% AS 50% SL	For breaking bud dormancy	2.0 – 3.0L/ha 2-3%	110 90-120	0.01
3.	Forchlorfenuron	0.1%L	For increasing fruit size	1.0 L/ha	60	0.01
4.	Alpha-nepthyl acetic acid	4.5% SL	To prevent premature flower/ fruit drop To increase size and weight of berries	4.1 ml/10L of water 0.41ml/10L of water	-	0.05
5.	Chlormequat chloride	5% SL	To induce early flowering	1200- 2000ml/ha	-	1.0 ppm
	<u>Herbicides</u>					
6.	Diuron	80 WP	Alternanthera echinata Amaranthus spp. Argemone mexicana Cleome viscosa Ipomoea spp. Xanthium strumarium Chenopodium album Fumaria parviflora Asphodelus tenuifolius Euphorbia hirta Medicago denticulate, Cyperus iria, Eleusine aegyptia	2000 gm	-	1.0 ppm
7.	2,4-D Sodium Salt	80 WP	Convolvulus sp Tridax procumbens	2500	90	2.0 ppm
8.	Paraquat dichloride	24 SL	Cyperus rotundus Cynodon dactylon Convolvulus sp. Portulaca sp. Tridax sp.	2080	90	0.05 ppm