Annexure-5
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NATIONAL RESEARCH CENTRE ON POMEGRANATE

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Agrochemicals recommended for control of various diseases and insect pests for export of Pomegranate

Note: Agrochemicals with asterisk (*) with label claim rest without label claim, hence recommendation is Adhoc)

Sr. No.	Pesticide recommended for major disease and pest	Nature of Pesticide	Dose on formulation basis	EU MRL (mg/kg)	Pre-harvest Interval (PHI in days)
DISEASES					
A	**Bacterial blight** *(Xanthomonas axonopodis pv. punicae)*				
1	Streptomycin Sulpihate 90% + Tetracycline hydrochloride 10%	S	0.5g/l	0.01*	55
2	Copper compounds (including Copper oxychloride 50% WP, Copper hydroxide 77% WP etc.)	NS	2-2.5g/l	20	60
B	**Wilt** (Fungal complex *Ceratocystis fimbriatam Fusarium oxysporum)*				
3	Propiconazole 25% EC	S	1.50 ml/l (drenching)	0.05	20
4	Carbendazim 50% WP	S	2.00 g/l (drenching)	0.1	100
5	Tridemorph 80% EC	S	1.0 ml/l 2.0(drenching)	0.01	40
C.	**Leaf Fruit Spots** *(Alternaria alternata, Cercospora punicae, Colletotrichum sp., Drechslera sp., Sphaceloma sp.)*				
6	Copper compounds (including Copper oxychloride 50% WP, Copper hydroxide 77% WP etc.)	NS	2-2.5 g/l	20	60
7	Mancozeb 75% WP	NS	2.0 g/l	0.05	90
8	*Propineb 70% WP	NS	3.0g/l	0.05	90
9	Copper hydroxide 77% WP	NS	2.0 g/l	20.0	60
10	Ziram 80% W	NS	2.0g/l	0.05	90

11	Captan 50% WP	NS	2.5g/l	0.02	35
12	Chlorothalonil 75% WP	NS	2.0 g/l	0.01	90
13	Difenoconazole 25% EC	S	1.0 g/l	0.1	90
14	Triadimefon 25% WP	S	0.5-1.0 g/l	0.1	40
15	Sulphur 80% WP	NS	2.5 g/l	50	15
16	Carbendazim 50% WP	S	1.0 g/l	0.1	90
17	Thiophanate Methyl 70% WP	S	1.0 g/l	0.1	50
D	**Fungal Blight** *(Phytophthora* sp*)*				
18	Mancozeb 75% WP	NS	2.0g/l	0.05	90
19	Copper Compounds (including Copper oxychloride 50% WP, Copper hydroxide 77% WP etc)	NS	2-2.5 g/l	20	60
20	Metalaxyl 8% + Mancozeb 64% (Metalaxyl MZ 72% WP)	S	2.5 g/l	0.05+0.05	90
21	Cymoxanil 8%+Mancozeb 64% (Curzate M8)	S	2.0 g/l	0.05+0.05	90
22	Fosetyl- AI 80%WP	S	2.0 g/l	75	30
23	Dimethomorph 50% WP	S	1.0 g/l	0.05	66
24	Azoxystrobin 23 SC	S	0.5-1.0 ml/l	0.05	45
25	Pyraclostrobin 20%	S	1.5 kg/ha	0.02	60
INSECT AND OTHER PESTS					
E	**Fruit Borer** (*Deudorix isocrates*)				
26	Indoxacarb 14.5% SC	NS	0.5 ml/l	0.02	30
27	Spinosad 45% SC	NS	0.5 ml/l	0.02	28
28	Cypermethrin 25% EC	NS	1.0 ml/l	0.05	40
F	**Stem Borer** (*Celosterna spinator*), **shot hole borer** (*Xyleborus fernicatus*)				
29	Chlorpyriphos 20% EC	NS	2.0 ml/l	0.05	40
30	Indoxacarb 14.5% SC	NS	0.5 ml/l	0.02	30
31	Spinosad 45% SC	NS	0.5 ml/l	0.02	28
32	Cypermerthrin 25%EC	NS	1.0 ml/l	0.05	40
G	**Mealy bug** (*Ferrisia virgata*)				
33	Chlorpyriphos 20% EC	NS	2.0 ml/l	0.05	40
34	Dimethoate 30% EC	S	1.0 ml/l	0.02	100
35	Imidacloprid 17.8% SL	S	0.3 ml/l	0.05	90
36	Thiamethoxam 25%WG	S	0.25 g/l	0.05	40
37	Methomy1 40 SP	S	1.0g/l	0.02	90
H	**Thrips/Aphids/Jassids/White flies**				
38	Dimethoate 30% EC	S	1.0 mL/l	0.02	100
39	Imidacloprid 17.8% SL	S	0.3 mL/l	0.05	90
40	Acetamiprid 20 SP	S	0.3 mL/l	0.01	90

41	Thiamethoxam 25%WG	S	0.25 g/l	0.05	40
42	Lambda-Cyhalothrin 05 CS	NS	0.20-0.5 ml/l	0.02	80
43	*Cyantraniliprole 10.26% OD	S	0.7-0.9 ml/l	0.02	90
I	**Mites**				
44	Propargite 57% EC	NS	1.0 ml/l	0.01	15
45	Abamectin 1.9% EC	S	0.5 ml/l	0.01	30
46	Azadirachtin 1%	NS	2.0 ml/l	0.01	3
J	**Nematodes**				
47	Azadirachtin 1%	NS	2.0 ml/l	0.01	3
48	Phorate 10 G	S	25g/plant	0.01	Data not available
49	Carbofuran 3G	S	40g/plant	0.01	Data not available
WEEDS					
50	Glyphosate	S	4-6ml/1	0.1	Data not available

NS= Non systematic, S= Systemic

Note:

- As the data based on scientific field trials on PHI for pomegranate are not available for most chemical hence, PHI given are only indicative and adhoc in nature as are based on PHI for other fruit crops grown in similar climatic conditions and residue analysis of limited samples of harvested produce in past years, hence, may change at later stage on availability of scientific data and are of advisory nature and therefore, not covered under any legal scrutiny.

- Recommended agrochemicals for the management of various insect pests and diseases along with their dose, PHI and MRL values are recommendations by SAUs, ICAR Institutes & research literature and of advisory nature for the Good Agriculture Practices and therefore, not covered under any legal scrutiny.

- All the doses mentioned above are for high volume sprayers, where normal spray volume is 800-1000 L/ha. Spray volume can however be changed as per the efficiency of sprayers used. However, the amount of each pesticide (active ingredient) recommended for 1 ha on the basis of 1000 L spray solution should be strictly maintained to minimize pesticide residues.