



ADVISORY FOR POMEGRANATE CROP HIT BY UNSEASONAL RAINS AND HAIL STORM (MARCH 2023)

Unseasonal rainfall and hailstorms in various states might damage agriculture and horticulture crops in different states in India. The extent of losses may vary from mild to 100% in different crops. Though in some cases the losses are irreparable, in others where the damage is less the crop can be saved. The advisory for pomegranate crop that might have been damaged to varying extents in different stages is given below based on crop stage.

S. No	Stage / Extent of damage	RECOMMENDATION
1.	All Fruits damaged and Branches broken / shredded	Remove and discard fruits, prune broken and shredded branches put into compost pit, apply 10% Bordeaux paste on cut ends, followed by spray of 1% Bordeaux mixture. Apply light dose of fertilizers and leave the crop on rest, follow IDIPM to prepare for next crop/bahar.
2.	Fruits Ready for Harvest	Harvest the damaged fruits and sell if fruits do not show rotting, otherwise put in compost pit. A protective spray of boric acid @ 2 g/L before harvest will help avoid rotting in fruits with surface injury. The heavily damaged fruits can be used for oil extraction from seeds; if such provision is there with some FPOs/companies these fruits can be sold/used for virgin pomegranate seed oil.
3.	Fruits to be harvested after one month	Follow Spray/Fertigation Schedule given below in Table 1
4.	Fruit lemon size	If 75% fruits on plants are damaged, it better to remove all fruits and prepare for next <i>bahar</i> (June- July) If 25% or less fruits damaged, remove affected fruits and protect remaining fruits with Spray / Fertigation Schedule given below in Table 1, followed by IDIPM Schedule
5.	Flowering/Fruit set started	Remove affected flower buds/fruits. Take Spray / Fertigation Schedule given below in Table 1, followed by IDIPM Schedule. Wait for more flowering and fruit set. If satisfactory flowering and fruit set is observed continue with IDIPM or otherwise leave orchard on rest and prepare for next crop season
6.	Non-bearing trees/in rest, with shredded leaves and	Prune and remove affected branches, paste cut ends with 10% Bordeaux paste, followed by spray of 1% Bordeaux mixture. Follow IDIPM

	branches	Schedule thereafter.
7.	Leaves fallen, fruits attached with some scars	If fruits received few and minor injuries take recommended Spray/Fertigation Schedule given below in Table 1.

TABLE 1: SPRAY/FERTIGATION SCHEDULE

S. No.	Days after Hailstorm	Spray/fertigate
i.	As early as possible	Boric Acid @ 2 g/L + Zinc Sulphate @ 2.5 g/L + quick lime @ 1.25 g/L + Mancozeb @ 2.5 g/L
ii.	07 -10	Spray Carbendazim 50% WP @ 2 g/L + Bronopol (95%) @ 0.5 g/L
		Fertigate/drench soil (weekly) with urea @ 40 g/plant + 0:52:34 – Mono Potassium Phosphate @ 20 g/plant and 0:0:50- Potassium sulphate @ 15 g/plant + Humic acid @10 ml/plant
iv.	10-13	Take 1 spray of Salicylic acid @ 30 g/100 litre water
v.	14-17	Micronutrient mixture @ 2 g/L. Only in bacterial blight affected orchards Streptocycline (Streptomycin sulphate 90% + Tetracycline hydrochloride 10%) @ 0.5 g/L should be taken.

INTEGRATED DISEASE AND INSECT PEST MANAGEMENT (IDIPM) SCHEDULE

- **For crop in rest period:** Take sprays of Bordeaux mixture (1%) altered with 2-bromo, 2-nitro propane-1, 3-diol @ 0.5 g/L mixed with copper based formulations like copper oxychloride @ 2.5 g/L **OR** Copper hydroxide @ 2.0 g/L at 10-15 days' intervals.
- **For crop in fruiting:** Spray Bordeaux mixture (0.5%), altered with Streptocycline @ 0.5g/L **OR** 2-bromo, 2-nitro propane-1, 3-diol @ 0.5 g/L mixed with copper based formulations like copper oxychloride **OR** copper hydroxide @ 2.0 - 2.5 g/L **OR** Carbendazim 50% WP @ 2 g/L **OR** appropriate fungicides depending on fungal problems present. Take sprays at 7 -10 days interval depending on local climate. Mix suitable insecticides if required.
- Insecticide sprays may be taken as per requirement.
- Orchards **not having** bacterial blight **should not take streptocycline and 2-bromo, 2-nitro propane-1, 3-diol**. Only fungicide and insecticide sprays should be taken
- Recommended fertilizer/fertigation application may be taken as per stage and age of crop.

NOTE: For Bahar wise detailed schedules/advisories check website <https://nrcpomegranate.icar.gov.in/Advisory>

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