



**National Agromet Advisory Service Bulletin**  
**Based on**  
**Extended Range Weather Forecast (ERFS)**

**Validity: 23<sup>rd</sup> February - 8<sup>th</sup> March 2018**

**Date of issue: 23 February 2018**

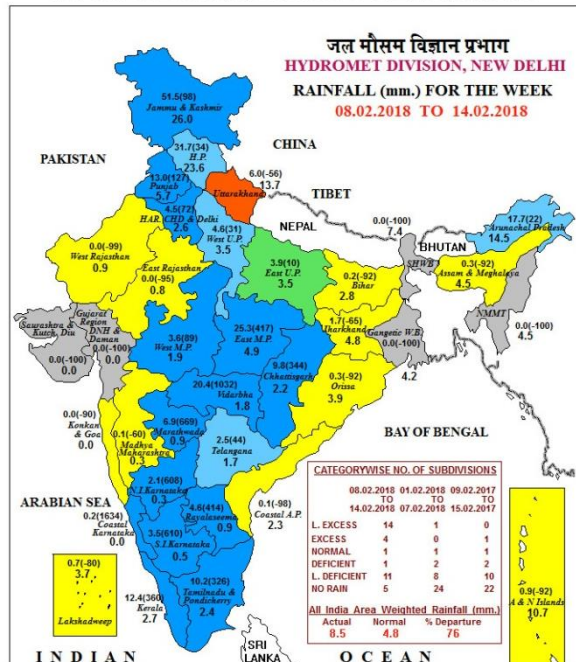
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**Central Research Institute for Dryland Agriculture (CRIDA), Hyderabad.**  
**&**  
**Earth System Science Organization**  
**India Meteorological Department**

# Realized Rainfall and Extended Range Forecast (Rainfall and Temperatures)

## Realized Rainfall

(8<sup>th</sup> to 21<sup>st</sup> February 2018)

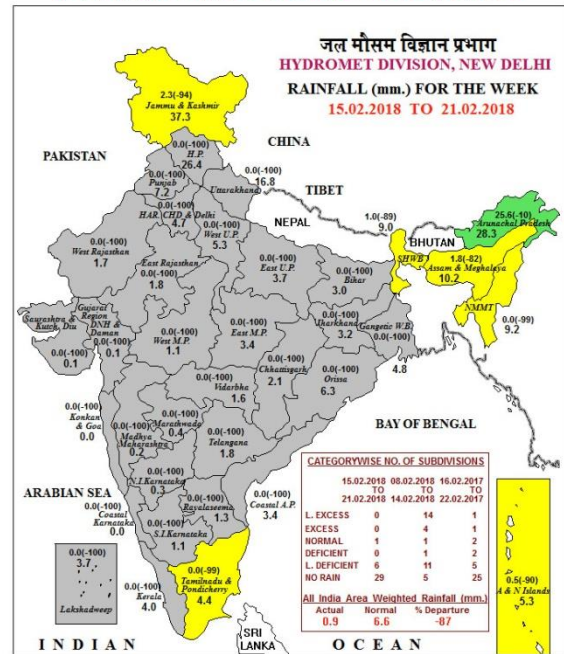
### भारत मौसम विज्ञान विभाग INDIA METEOROLOGICAL DEPARTMENT



LEGEND: L. EXCESS (+60% OR MORE) EXCESS (+20% TO +59%) NORMAL (+19% TO -19%)  
DEFICIENT (-20% TO -59%) L. DEFICIENT (-60% TO -99%) NO RAIN (-100%) NO DATA

NOTES:  
(a) Rainfall figures are based on operational data.  
(b) Small figures indicate actual rainfall (mm.), while bold figures indicate Normal rainfall (mm.)  
Percentage Departures of Rainfall are shown in Brackets.

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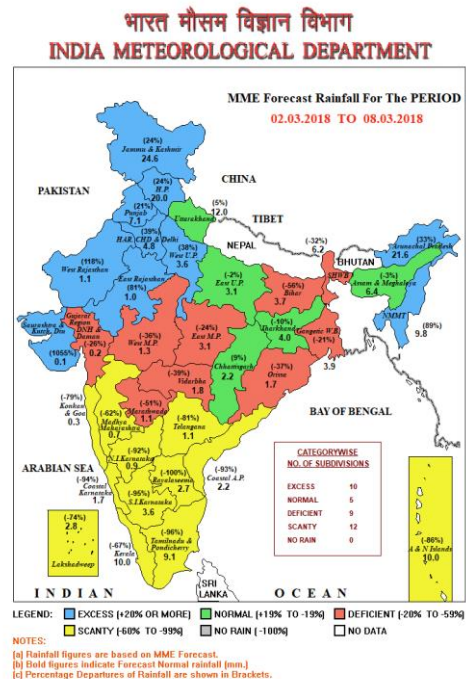
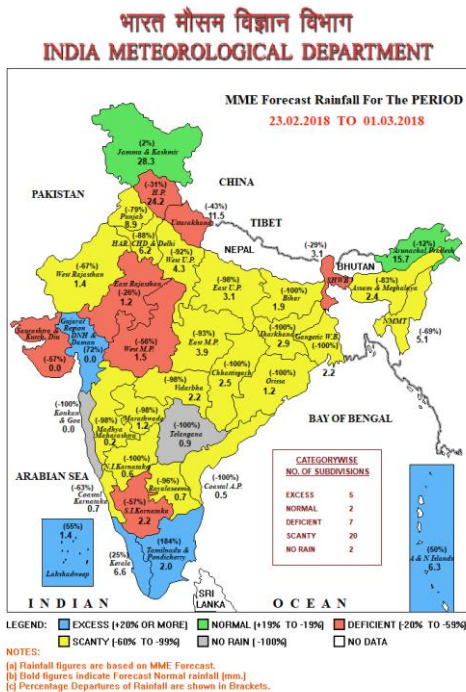
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(b) Small figures indicate actual rainfall (mm.), while bold figures indicate Normal rainfall (mm.)  
Percentage Departures of Rainfall are shown in Brackets.

- Normal or above normal rainfall occurred during last two weeks in Arunachal Pradesh.
- Normal or above normal rainfall occurred in either of the last two weeks in Jammu & Kashmir, Himachal Pradesh, Punjab, Haryana, Chandigarh & Delhi, Uttar Pradesh, Madhya Pradesh, Chhattisgarh, Marathwada, Vidarbha, Karnataka, Telangana, Rayalaseema, Tamil Nadu and Kerala.
- Below normal rainfall/no rain occurred in either of the two weeks over rest of the country.

## Extended Range Forecast System

**Rainfall forecast maps for the next 2 weeks (IC – 21 February)**

**(23<sup>rd</sup> February to 8<sup>th</sup> March 2018)**



### Extended Range Rainfall Forecast

**Week 1 (23.02.2018 to 01.03.2018):** Extreme northern India (J &K and HP and N/H) is expected to get rainfall associated with WD along with rainfall activity over south Tamil Nadu and Kerala region.

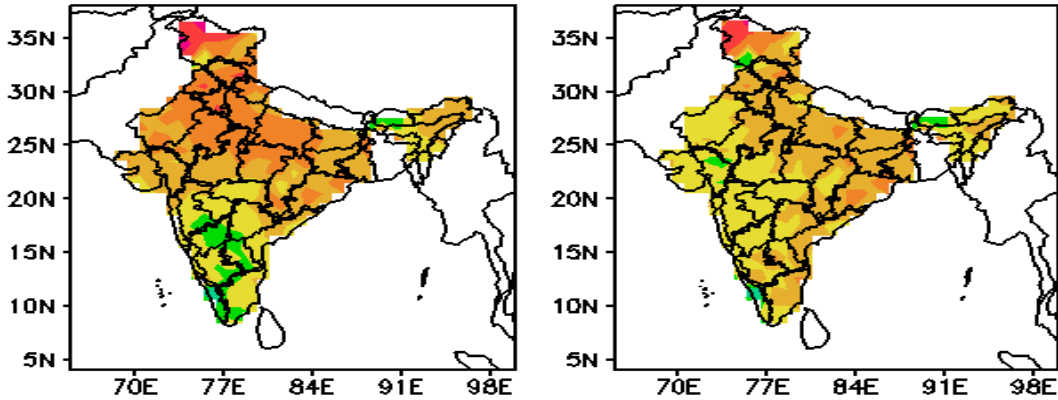
**Week 2 (02.03.2018 to 08.03.2018):** WD associated rainfall is expected to increase over NW India and also partly over north-eastern states.

Maximum and Minimum temperature anomaly ( $^{\circ}\text{C}$ ) forecast for next 2 weeks (IC – 21 February)  
(23<sup>rd</sup> February to 8<sup>th</sup> March 2018)

**MME Bias Corrected Tmax Anomaly (Deg)**

(Week1: 23Feb–01Mar)

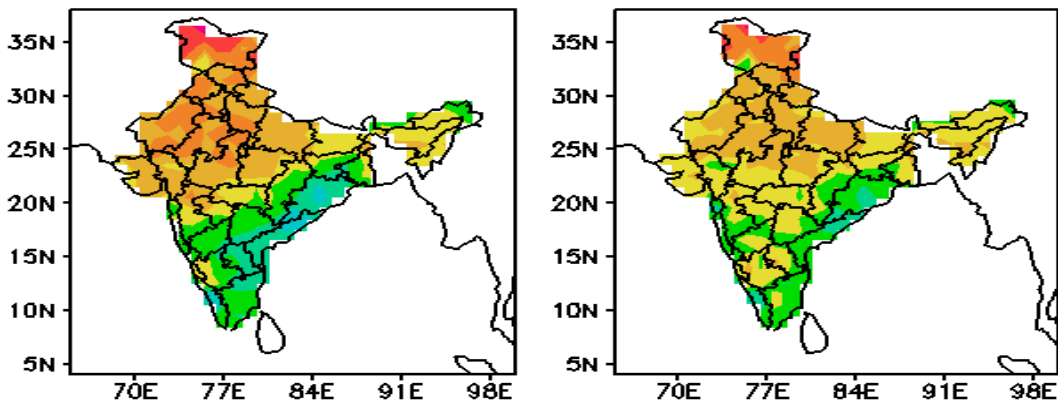
(Week2: 02Mar–08Mar)



**MME Bias Corrected Tmin Anomaly (Deg)**

(Week1: 23Feb–01Mar)

(Week2: 02Mar–08Mar)



**Tmax (Maximum Temperature)**

- **Week 1 (23.02.2018 to 01.03.2018) and Week 2 (02.03.2018 to 08.03.2018):** As it was indicated earlier, Tmax is likely to be above normal over most of India (Transition to warming period is evident) from week 1.

**Tmin (Minimum Temperature)**

- **Week 1 (23.02.2018 to 01.03.2018) and Week 2 (02.03.2018 to 08.03.2018):** Except some parts of eastern coastal belts of India and southern India (where Tmin will be below normal), most of north, NW and central India Tmin will be above normal.

## **Strategic Agricultural Planning based on rainfall during next two weeks till**

**08<sup>th</sup> March 2018**

### **Agromet Advisories**

#### **Tamil Nadu**

##### **Rainfall Situation**

Rainfall received during the period of 01 January to 21 February 2018 over Tamil Nadu is 16.8 mm, which is 38% deficit than the normal. The extended range weather forecast provided for next two weeks (23 February to 01 March and 02 to 08 March) are: above normal for week-1 and below normal for week -2.

- The anticipated weather condition is favourable for cut worm and fruit rot / die back disease incidence in chilli. Farmers are advised to spray Indoxacarb 14.5% SC@ 6.5 ml/10lit or Flubendiamide 20% WDG 6.0 g/10 lit to control it.
- The probable weather condition is likely to be favourable for bacterial leaf blight incidence in rice. For an effective management of the disease, farmers are advised to spray Copper Hydroxide 77 WP @1.25 kg/ha.
- Aphid incidence may occur in cotton, spray Dimethoate 30 EC 500 ml/ha or Acetamiprid 20% SP 50 kg/ha to control it.

#### **Kerala**

##### **Rainfall Situation**

Rainfall received during the period of 01 January to 21 February 2018 over Kerala is 17.2 mm, which is 6% deficit than the normal. The extended range weather forecast provided for next two weeks are: above normal for week-1 (23 February to 01 March) and below normal for week -2 (02 to 08 March).

- Farmers are advised to observe against rhizome weevil. Mulch the basins to conserve soil moisture. Irrigate once in three days. Against Sigatoka leaf spot disease, spray 1% Bordeaux mixture or Tilt 25 EC @ 1ml/lit of water. Remove and destroy the severely affected banana leaves.
- Irrigation may be given in arecanut once in 3-5 days @ 175 litres per palm. Apply fertilizers to irrigated areca nut palms @ 110 g urea, 100 g rock phosphate and 120 g potash per palm. Protect the palms from direct sunlight by wrapping the stems with areca sheaths or white wash the exposed portion.

#### **Karnataka**

##### **Rainfall Situation**

Rainfall received during the period of 01 January to 21 February 2018 over different meteorological sub-divisions of Karnataka viz., North Interior Karnataka is 2.0 mm (34 % deficit than the normal), South Interior Karnataka is 3.6 mm (15% excess from the normal) and Coastal Karnataka are 0.2 mm (78 % deficit than the normal). The extended range weather forecast provided for next two weeks (23 February to 01 March and 02 to 08 March) are below normal for all the meteorological sub divisions of the state for both the weeks.

## **South Interior Karnataka**

- Post-harvest operations like winnowing, cleaning, drying and storage in dry gunny bag may be carried out for harvested rabi crops.
- Mango: Dry spell situation exists since one month, it is favorable for higher flowering and this weather also congenial for Powdery mildew diseases infestation in mango. To control malformation in mango, farmers are advised to spray Lambda Cyhalothrin 5 EC @ 0.5 ml/litre of water or sulphur dust (SULTAF) 80 W @ 3g/litre of water.
- Farmers are advised to keep the animal habitation dry to avoid hoof infection and to prevent fly breeding. It is the right time for de -worming of animal. Keep the cattle shed clean & warm
- Provide artificial brooding for the chicks to maintain adequate temperature. Sides should be covered with curtains during cool hours of the day. Wet litter material should be removed regularly.

## **Maharashtra**

### **Rainfall Situation**

Rainfall received during the period of 01 January to 21 February 2018 over different meteorological sub divisions of the state viz., Vidarbha is 20.4 mm (47% excess than the normal), Marathwada is 6.9 mm (33% excess than the normal), Madhya Maharashtra 0.1 mm (91% deficit from the normal), and Konkan & Goa 0.0mm (99% deficit from the normal). The extended range weather forecast provided for next two weeks are, During week-1 (09 to 15 February) No rain for Konkan & Goa, Madhya Maharashtra and Marathwada and vidarbha is below normal, and during week-2 (23 February to 01 March) below normal for all the sub divisions of the state.

### **Marathwada**

- Weather conditions are congenial for infestation of stem borer in pearl millet. Spray Quinalphos or Chloropyrifos @ 20 ml per 10 liter of water.
- As below normal rainfall is forecasted. Farmers are advised to apply protective irrigation in summer groundnut crop.
- If infestation of gram pod borer is observed in late sown chickpea, spray Chlorpyrifos 20 EC @ 25 ml or Quinalphos 25 EC @ 20 ml per 10 liter of water.
- Farmers are advised to take a spray of sulphur @ 2 gm per liter of water to control powdery mildew infestation in mango.

### **Konkan & Goa**

- There is a possibility for increased incidence of hopper, aphids and thrips on vegetable crops viz., brinjal, tomato, cabbage, chilli, etc. If it is noticed, spray Malathion @ 20 ml or Dimethoate @ 12 ml/10 liter of water.
- Weather is congenial for the incidence of tea mosquito bug on new emerging flush of cashew. Farmers are advised to spray Lambda Cyhalothrin 5% EC @6 ml. in 10 lit. of water.
- Farmers are advised to protect the animals/poultry birds from low temperature by providing curtains and electric bulbs as per the need.

## **Chhattisgarh**

### **Rainfall situation**

Rainfall received over Chhattisgarh during the period of 01 January to 21 February is 0.3 mm, which is 99% deficit than the normal. The extended range weather forecast provided for next two weeks are: below normal for week-1 (23 February to 01 March) and normal for week-2 (02 to 08 March).

- Weather is conducive for purple blotch diseases infestation in onion. Farmers are advised to spray Saaf fungicide @ 2 g per liter of water.
- Weather condition is congenial for stem borer attack in summer paddy crop. Farmers are advised to fix pheromone traps and light trap nearby the field for the control of stem borer.
- For the control of adult caterpillar in gram, spray Profenofos + Cypermethrin mixed insecticide @ 400 ml/acre dissolved in 200 liter water.
- Presently mango crop is at flowering/fruit setting stage, at this stage powdery mildew is commonly observed in mango and causes poor fruit setting and later on fruit dropping. Hence, farmers are advised to observe the trees and whenever the symptom appears, spray Carbendizim (Bavistin) @1.5g or Sulphex @3.0g per litre of water.

## **Orissa**

### **Rainfall situation**

Rainfall received over Orissa during the period of 01 January to 21 February is 0.3 mm, which is 99% deficit than the normal. The extended range weather forecast provided for next two weeks (23 February to 01 March and 02 to 08 March) are: Below Normal for both the weeks.

- Pine apple varieties viz., Que, queen, Simachalan and Maritius may be planted under prevailing weather conditions. Use healthy, robust 3-4 months aged rhizomes of 350-400 g by weight. Before planting, apply 15 kg compost /pit. Apply 10 g N, 12 g P<sub>2</sub>O<sub>5</sub> and 4 g K<sub>2</sub>O. Plant the seeds directly in the pit or 40 days old seedlings raised in polyethylene bags.
- As below normal rainfall is forecasted, apply the irrigation in maize crop as crop is in silking stage and do not allow water stagnation for more than 6 hours in the field.
- Now it is optimum time for sowing of summer cow pea. Grow the following improved varieties of cowpea such as bush type- Pusa Phalguni, Pusa Komal, and runner type- American long, and Banarasi long. Besides these varieties other improved varieties like Russian Giant, EC-4316, NP-3, C-152, UPC-286, UPC- 5286 and IGFI- 450 can be grown. Use 10-12 kg seeds/acre, apply 3 ton FYM/acre during land preparation grown for vegetable purpose. Apply 8 kg N, 16 kg P<sub>2</sub>O<sub>5</sub>/ and 8 kg. K<sub>2</sub>O per acre as basal dose. Treat the seeds with 1 g Benomyl per kg of seed and also with Rhizobium culture.
- High humidity may aggravate the infestation of mango hopper. In taller plants, farmers are advised to give fumigation of neem leaves. Spray Chloropyrifos @ 20 ml or Imidachloprid @ 3 ml per litre of water and after 1 week spray carbendazim / mancozeb @ 3 g per litre.

## **Jharkhand**

### **Rainfall situation**

Rainfall received over Jharkhand during the period of 01 January to 21 February is 2.2 mm, which is 93% deficit than the normal. The extended range weather forecast provided for next two weeks are: below normal for week-1 (23 February to 01 March) and normal for week-2 (02 to 08 March).

- As below normal rainfall is forecasted and timely sown wheat crops are at heading stage. Farmers are advised to apply irrigation.
- Recommended variety of summer mung is S.M.L.- 668 and the seed rate is 12 kg per acre. Before sowing, seed must be treated with rhizobium culture.
- Farmers are advised to control the attack of pumpkin beetle immediately in cucurbitaceous plant. Wet the soil near the root zone of the plant with the insecticide Chloropyrifos (4 ml. per liter of water) and also spray the same insecticide on plant @ 2 ml. per liter of water. In absence of the insecticide, broadcast the wood ash mixed with kerosin oil on the plant during early morning.

## **Bihar**

### **Rainfall Situation**

Rainfall of 0.4 mm was received during the period of 01 January to 21 February is 2018 over Bihar, which is 98% deficit than the normal. The extended range weather forecast provided for next two weeks (23 February to 01 March and 02 to 08 March) are: below Normal for both the weeks.

- Summer maize varieties such as Suwan, Deoki, Ganga 11, Shaktiman-1, 2, 3, 4 & 5 with assured irrigation facility are recommended. Recommended seed rate is 20 kg per hectare. Farmers are advised to treat seeds with Thiram and Captan @2.5gm per kilogram of seeds.
- Farmers are advised to provide irrigation in rabi maize, which is in tassel/silking stage. Application of 50 kg nitrogen/ha is advised after irrigation.
- As below normal rainfall is forecasted, farmers are advised to provide irrigation in timely sown wheat crop which is in booting to panicle initiation stage. Application of 30 kg nitrogen/ha after irrigation.

## **Assam**

### **Rainfall Situation**

Assam received 9 mm of rainfall during the period of 01 January to 21 February 2018, which is 76% deficit than the normal. The extended range weather forecast provided for next two weeks are: Below Normal during week-1 (23 February to 01 March) and Normal during week-2 (02 to 08 March).

- As clear sky condition is forecasted, farmers may harvest the rapeseed and mustard crop when 75-80% siliqua turns yellow in colour.
- As below normal rainfall is forecasted, farmers are advised to go for irrigation in the onion crop at 7 days interval. Against downy mildew disease farmers are advised to spray Ridomil @ 2.5gm/lit at an interval of 10 days.
- Farmers are advised to prepare land for growing of summer green gram & black gram crop under irrigated condition. Sandy loam soil is more preferable. The recommended varieties are T9, Pant U 19, UG 157 etc. for black gram and Kopergaon, Pratap, AAU 39 etc. for green gram cultivation.



- Farmers are advised for vaccinate the 4-7 days old and 35 days old birds with F1/ Lasota vaccine @ 1 drop through eye and nostril.

## **Haryana**

### **Rainfall Situation**

Rainfall is received during the period of 01 January to 21 February 2018 over Haryana is 9.5 mm, which is 67% deficit than the normal. The extended range weather forecast provided for next two weeks over Haryana are: below normal for week-1 (23 February to 01 March) and above normal for week-2 (02 to 08 March).

- As above normal rainfall is forecasted for second week, farmers are advised to withhold irrigation temporarily in the wheat crop.
- Due to possibility of dry weather in first week, farmers are advised to apply light irrigation in Berseem and cut the crop for fodder to feed livestock.
- Farmers are advised to, keep the animals under sheds during night hours for protection from cold. Provide 50 grams iodized salt and 50 to 100 grams mineral mixture daily with animal feed/fodder to keep them healthy.

## **Punjab**

### **Rainfall Situation**

22.3 mm of rainfall is received during the period of 01 January to 14 February 2018 over Punjab, which is 49% deficit than the normal. The extended range weather forecast provided for next two weeks over Punjab are: below normal for week-1 (23 February to 01 March) and above normal for week-2 (02 to 08 March).

- Farmers are advised to observe the appearance of yellow rust disease in wheat. If symptoms is appeared, spray 200 ml Tilt/ Bumper/Shine/Stilt/Compass/Markzole 25 EC in 200 litres of water per acre to check its further spread.
- Monitor wheat and mustard crop for aphid attack. If the population reaches ETL, spray recommended insecticides like Actara (Thiamethoxam 25 WG @ 20 g/acre in wheat and 40 g/acre in mustard) using 80-100 litres of water.
- If symptoms of late blight of potato appears, spray the crop with Indofil M-45/Kavach @ 500-700 g in 250-350 litres of water per acre.
- Deworming should be done in calves especially against Ascariasis/Malap. Feed well chaffed berseem mixed with wheat straw.

## **Himachal Pradesh**

### **Rainfall Situation**

Rainfall received during the period of 01 January to 21 February 2018 over Himachal Pradesh is 40.5 mm, which is 76% deficit from the normal. The extended range weather forecast provided for next two weeks over Himachal Pradesh are, below normal for week-1 (23 February to 01 March) and above normal for week-2 (02 to 08 March).

- Rise in maximum temperature in current weather conditions, aphid incidence may occur in mustard. Farmers are advised for monitoring of mustard crop against aphid attack.

- Weather is also conducive for the incidence of yellow rust in wheat. Farmers are advised to regularly monitor their fields.

## **Jammu**

### **Rainfall Situation**

Rainfall received during the period of 01 January to 21 February 2018 over Jammu and Kashmir is 61.2 mm, which is 66% deficit than the normal. The extended range weather forecast provided for next two weeks over Jammu & Kashmir is Normal for week-1 (23 February to 01 March) and Above Normal for week-2 (02 to 08 March).

- The weather condition is congenial for yellow rust infestation. Farmers are advised to regularly monitor wheat fields for yellow rust and if noticed, apply Propaconazole (Tilt) @ 25ml in 25 lits. of water/kanal and repeat same after 10-15 days during clear weather.
- In Gram, the weather is congenial for the outbreak of Aschochyta blight and wilt diseases. If the symptom observed, farmers are advised to drench the affected spots with Bavistin @ 10ml/ lit. of water.
- The current weather conditions favours the outbreak of aphids in late sown mustard crop. Farmers are advised to regular monitor for attack of aphids, if the 10 cm of the branch have more than 20 aphids, spray the crop with imidacloprid @ 0.3 ml / lits. of water or (Dimethoate) rogor 30 EC @ 1ml/litres. of water during clear weather.

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