



राष्ट्रीय कृषि मौसम परामर्शी सेवाएं बुलेटिन
National Agromet Advisory Services Bulletin

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विस्तारित अवधि मौसम पूर्वानुमान/Extended Range Weather Forecast (ERFS)

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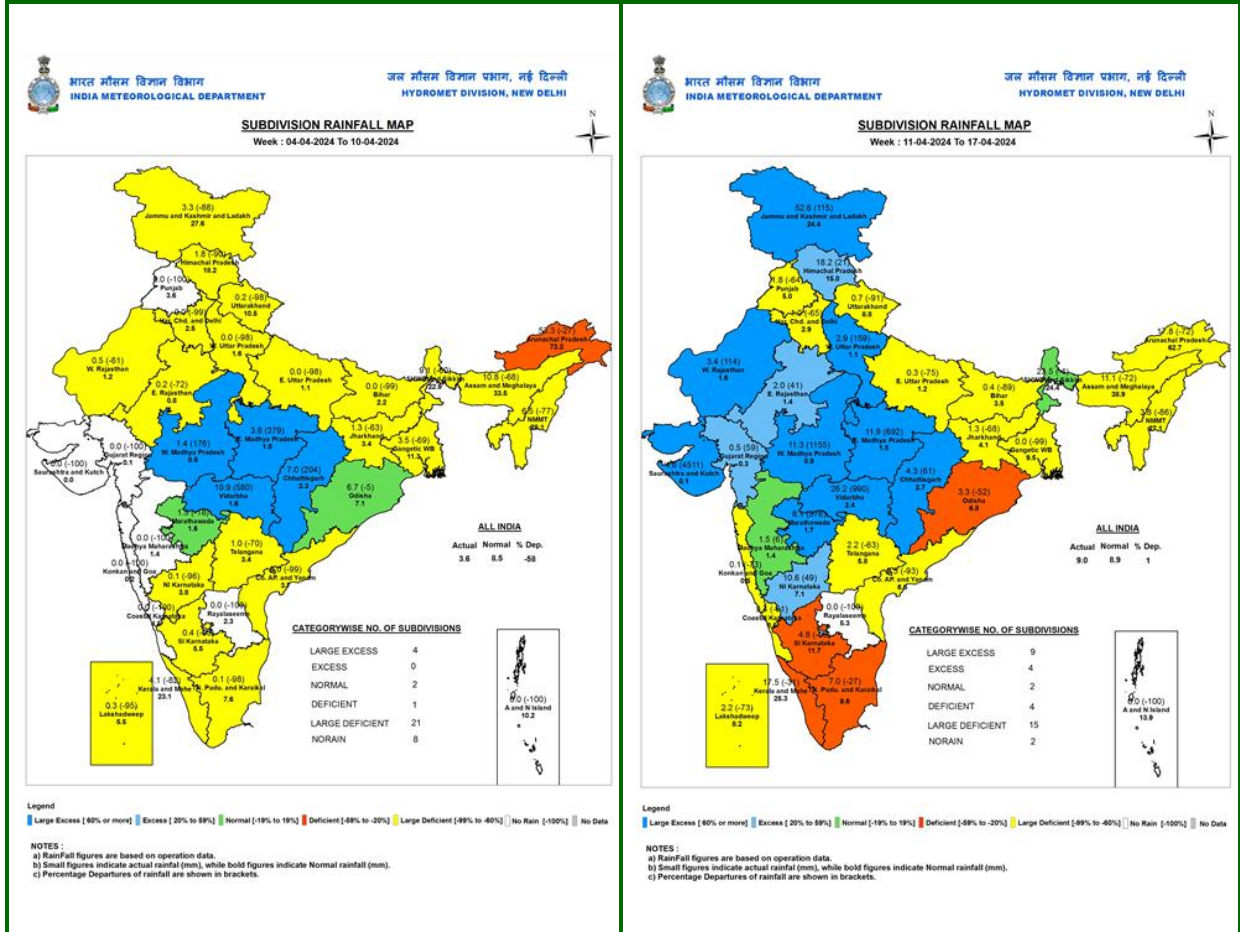
India Meteorological Department (IMD)

पृथ्वी प्रणाली विज्ञान संगठन

Earth System Science Organization

Realized Rainfall and Extended Range Forecast

Realized Rainfall (04th to 17th April, 2024)

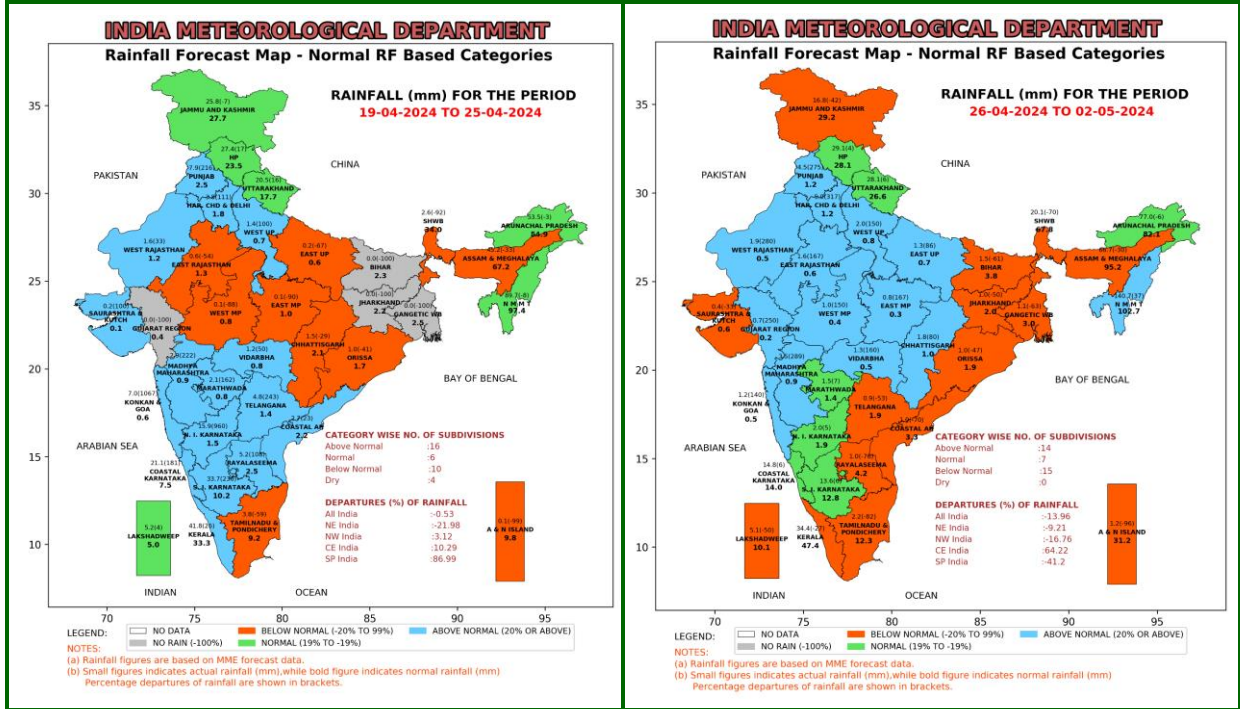


- Normal or above normal rainfall occurred in both the weeks over Madhya Pradesh, Chhattisgarh, Marathwada and Vidarbha.
- Normal or above normal rainfall occurred in either of the two weeks over Jammu & Kashmir and Ladakh (UTs), Himachal Pradesh, Rajasthan, West Uttar Pradesh, Sub-Himalayan West Bengal & Sikkim, Odisha, Gujarat State, Madhya Maharashtra and North Interior Karnataka
- Below Normal rainfall/no rain occurred in both the weeks over rest of the States & UTs.

Extended Range Forecast System

Rainfall forecast maps for the next 2 weeks (IC- 17th April, 2024)

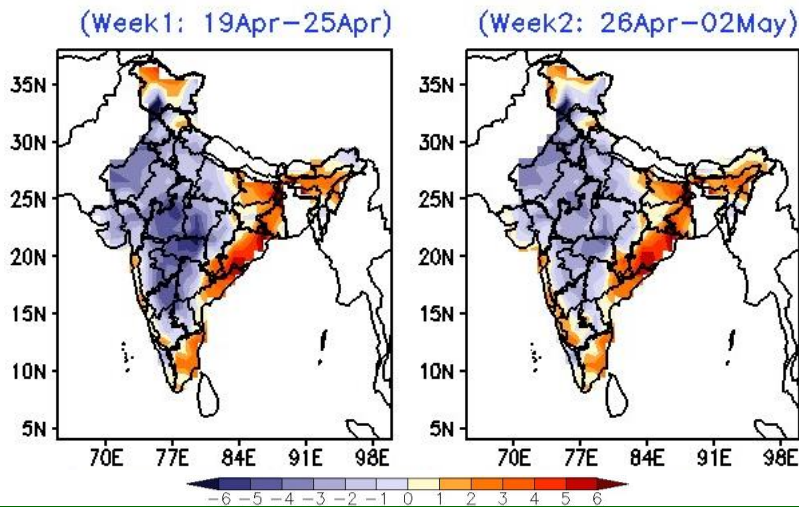
(19th April to 02nd May, 2024)



- **Week 1 (19.04.2024 to 25.04.2024) and Week 2 (26.04.2024 to 02.05.2024):** Rainfall is likely over Jammu & Kashmir, Himachal Pradesh, Uttarakhand, Punjab, Northeast India, Kerala and Karnataka.

**Maximum and Minimum temperature anomaly ($^{\circ}$ C) forecast
for the next 2 weeks (IC- 17th April, 2024)
(19th April to 02nd May, 2024)**

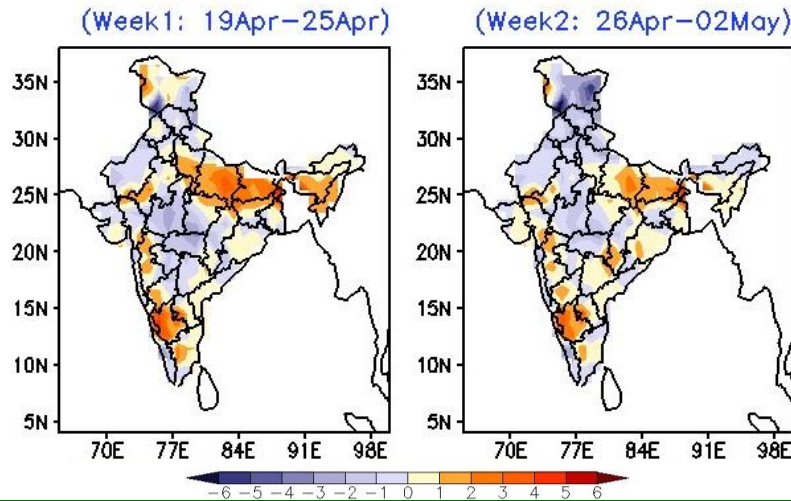
MME forecast Tmax anomaly (Deg C)



Maximum Temperature (Tmax)

- **Week 1 (19.04.2024 to 25.04.2024) and Week 2 (26.04.2024 to 02.05.2024):** Maximum temperature is likely to be below normal over most parts of the country. However, it is likely to be above normal over Jammu & Kashmir, East India, Northeast India, Konkan-Goa, Coastal Karnataka and regions along the East coast of India.

MME forecast Tmin anomaly (Deg C)



Minimum Temperature (Tmin)

- **Week 1 (19.04.2024 to 25.04.2024) and Week 2 (26.04.2024 to 02.05.2024):** Minimum temperature is likely to be above normal over parts of Uttar Pradesh, East India, Northeast India and South Peninsula. However, it is likely to be below normal over parts of Northwest India and central India.

Agromet Advisories

Uttar Pradesh

22 mm (48% excess) rainfall received over Western Uttar Pradesh and rainfall received over Eastern Uttar Pradesh was 14 mm (20% excess) during 01 March - 21 April 2024. The extended range weather forecast (rainfall) for the next two weeks (19 - 25 April 2024 and 26 April - 02 May 2024) is above normal over Western Uttar Pradesh and below normal over Eastern Uttar Pradesh during week 1 and; above normal over Western Uttar Pradesh and Eastern Uttar Pradesh for week 2.

Western Uttar Pradesh

- Due to the forecast of above-normal rainfall during this week, farmers are advised to harvest mature wheat and barley crops as soon as possible and after tying bundles keep it in a safe, dry place.
- And also advised to postpone irrigation in *zaid* maize, summer vegetable and black gram crops and do weeding at proper moisture level.
- To protect the *zaid* maize (knee high stage) from stem borer, it is advised to broadcast of Phorate 10% CG granules 10 kg/ha.
- To protect the chickens from heat, arrange curtains, fans and ventilation in the hen house. To reduce the temperature of the hen house, cover the roof of the shed with straw

Eastern Uttar Pradesh

- Due to the forecast of below-normal rainfall this week and an increase in temperature, farmers are advised for frequent irrigation in vegetables, nurseries of vegetables, fodder crops and orchards. Farmers are also advised to protect vegetable nurseries and orchards against hot winds by physical barriers.
- Constant monitoring of lady finger crop against attack of mite is advised. If the population is above ETL then, spraying of Spiromesifen 22.90 % SC @ 1 ml/litre or Fenazaquin 10 % EC 2ml/litre of water is advised during a clear sky.

Himachal Pradesh

176 mm (10% excess) rainfall was received over Himachal Pradesh during 01 March - 21 April 2024. The extended range weather forecast (rainfall) provided for the next two weeks (19 - 25 April 2024 and 26 April - 02 May 2024) over Himachal Pradesh is normal for week 1 and; week 2.

- Light irrigation in potato one week before harvesting which is at tuber formation and harvesting stage in mid hills and ensure proper storage.
- Farmers are advised to go for sowing of summer vegetables in well-prepared fields with FYM soak seed overnight in water before sowing for better germination
- Outbreak of armyworm/stem borer is reported in wheat crop (soft to hard dough in mid and high hills) in many parts of the state. For the control of these pests spray either Chlorpyrifos 20 EC or Quinalphos 20 EC @ 2 ml/litre of water.

Jammu

208 mm (-08% deficit) rainfall was received over Jammu during 01 March - 21 April 2024. The extended range weather forecast (rainfall) provided for the next two weeks (19 - 25 April 2024 and 26 April - 02 May 2024) over Jammu is normal for week 1 and; below normal for week 2.

- Due to rainy weather conditions it is advised to postpone harvesting and threshing of early and normal sown wheat till the weather gets clear. Keep the bundles of harvested crops in stacks and cover them with polythene sheets/tarpaulin. Do not let rainwater stagnate in fields.
- Due to rain in the past week and chances of light rainfall, it is advised to maintain proper drainage in crop fields to avoid water logging. And, transplanting of vegetable seedlings may be continued after the weather improves.
- It is the right time to start beekeeping especially for beginners. Artificial feeding of the bee colonies with a sugar: water solution 1:1 ratio is recommended. And, also reduce the entrance of boxes to protect bees from rain.

Rajasthan

6 mm (-16% deficit) rainfall was received over East Rajasthan during 01 March - 21 April 2024. The extended range weather forecast (rainfall) provided for the next two weeks (19 - 25 April 2024 and 26 April - 02 May 2024) over East Rajasthan is below normal for week 1 and; above normal for week 2.

- Summers deep ploughing is advised to open up the field that is required for exposure of insect eggs and pupa and weed seeds towards sunlight.
- Intercultural operations and hand hoeing are advised to control weed infestation and proper pegging.
- Due to the forecast of below-normal rainfall and an increase in temperature, farmers are advised to irrigate standing vegetable crops like bhindi, brinjal, tomato, chilli and cucurbits as per requirement.

Haryana

18 mm (-19% deficit) rainfall was received over Haryana during 01 March - 21 April 2024. The extended range weather forecast (rainfall) provided for the next two weeks (19 - 25 April 2024 and 26 April - 02 May 2024) over Haryana is above normal for week 1 and; week 2.

- Due to changing weather, farmers are advised to provide 50 grams of iodized salt and 50-100 grams of mineral mixture daily with feed & green fodder to the cattle/animals to keep them healthy.
- Due to the forecast of above rainfall this week, farmers are advised to expose the field to rainfall during this period which will help in the preparation for sowing of cotton crop.

Punjab

26 mm (-23% deficit) rainfall was received over Punjab during 01 March - 21 April 2024. The extended range weather forecast (rainfall) provided for the next two weeks (19 - 25 April 2024 and 26 April - 02 May 2024) over Punjab is above normal for week 1 and; week 2.

- Farmers are advised to harvest and store the wheat grains at the proper place as there are chances of rainfall in the week.
- Farmers are advised to start sowing of fodder maize, sorghum, bajra, Napier bajra and guinea grass to get early fodder.

- Irrigate the sugarcane crop at 7-12 days intervals for better growth of the crop. Apply paddy straw or rice husk or sugarcane trash @ 20-25 q/acre between the rows of sugarcane to reduce soil temperature and moisture loss.
- For controlling purple blotch in onion which is at the vegetative stage, it is advised to spray Difenconazole 25 EC@ 100 ml mixed with 100 litres of water then mix it with 500 litres per hectare or Tebuconazole 38.39% w/w SC @1ml per litre of water as soon as the first symptom of purple blotch appears in the field.

West Bengal

50 mm (-11% deficit) rainfall was received over Gangetic West Bengal and rainfall received over Sub Himalayan West Bengal was 130 mm (-2% deficit) during 01 March - 21 April 2024. The extended range weather forecast (rainfall) for the next two weeks (19 - 25 April 2024 and 26 April - 02 May 2024) is no rainfall over Gangetic West Bengal and below normal over Sub-Himalayan West Bengal during week 1; and below normal over Sub-Himalayan West Bengal and Gangetic West Bengal for week 2.

- Farmers may apply fertilizers and pesticides this week as no rainfall is forecasted. Irrigation may be also given wherever needed, especially in green gram and summer vegetables.
- To manage thrips in chilli (fruiting), it is advised to spray Imidacloprid 17.8 SL@ 0.4 ml or Acetamiprid 20 SP @0.16 g or Cyantraniliprole 10.26 % OD@07ml per litre water.

Jharkhand

37 mm (39% excess) rainfall was received over Jharkhand during 01 March - 21 April 2024. The extended range weather forecast (rainfall) provided for the next two weeks (19 - 25 April 2024 and 26 April - 02 May 2024) over Jharkhand is no rainfall for week 1 and; below normal over week 2.

- Go for earthing up in summer maize which is in knee stage height and the third dose of Nitrogenous fertilizer should be applied at 26 kg urea per acre in a silking stage of maize crop.

Bihar

32 mm (77% large excess) rainfall was received over Bihar during 01 March - 21 April 2024. The extended range weather forecast (rainfall) provided for the next two weeks (19 - 25 April 2024 and 26 April - 02 May 2024) over Bihar is no rainfall for week 1 and; below normal over week 2.

- Due to the forecast of no rainfall, farmers are advised to harvest and dry wheat and mustard crops.
- Monitoring is advised in tomato crops for infestation of fruit borer insects. If infestation is found, installation of bird perches in tomato crops is advised. Also, if the pest population reaches ETL spraying of Spinosad 48 EC @1 ml/4 litres of water is recommended.
- Sowing of elephant foot yam is advised. *Gajendra* variety is recommended for sowing in North Bihar. Application of 10-15 ton FYM, 40 kg Nitrogen, 60 kg Phosphorus, and 80 kg Potash per hectare is advised during land preparation.

Odisha

62 mm (48% excess) rainfall received over Odisha during 01 March - 21 April 2024. The extended range weather forecast (rainfall) provided for the next two weeks (19 - 25 April 2024 and 26 April - 02 May 2024) over Odisha is below normal for week 1 and; week 2.

- Use a temporary shade net to protect the fruit plants from high temperatures.
- The increasing day temperature may cause bacterial wilt disease in tomatoes and brinjal. To protect, it is advised to spray 1 gram of Streptocycline in 10 litres of water in the root zone.
- Prolonged dry spell followed by rain may increase the infestation of fall armyworms in maize. To control this spray Emamectin benzoate 5% SG @0.4g or Isocycloseram 18.1% W/W SC @0.6 ml/litres of water.
- Under prevailing dry weather conditions, farmers are advised to drip and sprinkler irrigation practices wherever possible in the event of limited water availability particularly for commercial crops including fruit orchards and widely spaced vegetables. Sprinkler irrigation brings down the heat effect. For row crops alternate rows may be irrigated.

Chhattisgarh

41 mm (140% large excess) rainfall received over Chhattisgarh during 01 March - 21 April 2024. The extended range weather forecast (rainfall) provided for the next two weeks (19 - 25 April 2024 and 26 April - 02 May 2024) over Chhattisgarh is below normal for week 1 and; above normal for week 2.

- Due to high minimum and maximum temperatures and below normal soil moisture status cause thermal stress in crops. Farmers are advised to adopt water conservation agronomic techniques and apply light irrigation in *rabi* crops wherever required.
- Inter-culture, fertilizer application, and earthing followed by irrigation are advised in sugarcane crops at knee height stage.
- If yellow stem borer is observed in the rice crop, it is advised to spray Cartap Hydrochloride 75 % SG @1gram or Chlorpyrifos 20 % EC @ 1.5 ml per litre of water.

Gujarat

4 mm (330% large excess) rainfall received over Gujarat during 01 March - 21 April 2024. The extended range weather forecast (rainfall) provided for the next two weeks (19 - 25 April 2024 and 26 April - 02 May 2024) over Gujarat is no rainfall for week 1 and; above normal for week 2.

- Due to no rainfall forecast in this week, farmers are advised to apply irrigation at critical stages (tillering, flag leaf and flowering) of summer pearl millet as per soil moisture conditions.
- To control fruit dropping in mango tree, spray 2 g (20 ppm) Naphthalene acetic acid with 2 kg (2%) Urea in 100 litres of water when the fruit is about pea size.
- As there is an increase in temperature, it is advised to provide irrigation in vegetable and fruit crops and give the recommended dose of fertilizer.
- Sudden increase in temperature with relative humidity favours the population growth of thrips in mango. For management, spraying of Tolfenpyrad 15 EC @ 20 ml/10 litres water is recommended.

Maharashtra

4 mm (-45% deficit) rainfall over Madhya Maharashtra; 46 mm (196% large excess) rainfall over Vidarbha; 15 mm (36% excess) rainfall over Marathwada; and 4 mm (11% large excess) rainfall over Konkan region was recorded during 01 March - 21 April 2024. The extended range weather

forecast (rainfall) for the next two weeks (19 - 25 April 2024 and 26 April - 02 May 2024) is above normal over Konkan, Vidarbha, Madhya Maharashtra and Marathwada for week 1 and above normal over Konkan, Vidarbha, Madhya Maharashtra and normal over Marathwada for week 2, respectively.

Parbhani

- As thunderstorms accompanied with lightning, light rain and gusty wind are expected at isolated places, harvest matured onion, watermelon, muskmelon, grapes, mango and sapota at the earliest and keep harvested produce at safer places.
- As per forecast of light to moderate rain at isolated places, harvesting of mature wheat and safflower crops is advised as early as possible. If threshing is not possible collect and cover the harvested crop with plastic paper. Store the harvested/threshed produce at safe places.
- Due to gusty wind, thunderstorm, hail and rainfall was observed at isolated places in the Marathwada region. farmers are advised to provide mechanical support to newly planted citrus plants

Vidarbha

- Due to the forecast of above-normal rainfall, and thunderstorms accompanied by lightning, farmers are advised to harvest matured vegetables and fruits at the earliest and keep harvested produce at safer places.
- For control of fruit drop in mandarin orange/sweet orange/acid lime spray, it is advised to apply Gibberellic acid @ 1.5 g or NAA @ 1 g + 1 kg urea + Carbendazim 0.1% (100 g) per 100 litres of water.
- For control of leaf miners, thrips, and jassids in groundnut, it is advised to spray
- Isocycloseram 9.2% W/W Dc @ 1ml/liter of water or Lambda-cyhalothrin 5 EC @ 1.5 ml or Quinalphos 25% @ 1.4 ml per litre of water.

Kerala

41 mm (-60% large deficit) rainfall received over Kerala during 01 March - 21 April 2024. The extended range weather forecast (rainfall) for the next two weeks (19 - 25 April 2024 and 26 April - 02 May 2024) is above normal for week 1 and; below normal for week 2.

- Since air temperature is increasing, it is a desirable practice to bury fresh or dried coconut husk around the palm to conserve soil moisture. The husk can be buried either in linear trenches taken 3 meters away from the trunk between rows of palms or in circular trenches taken around the palm at a distance of 2 meters from the trunk.
- Since dry weather conditions are prevailed, irrigate areca nut once in 3-5 days @ 175 litres per palm. Protect the palms from direct sunlight by wrapping the stems with areca sheaths or whitewash the exposed portion.
- As the hot weather conditions may increase the infestation of thrips, aphids, and whiteflies on the crops, spray at the top and bottom of the leaves with 2% strength neem oil garlic emulsion on every two weeks.
- Since dry weather conditions is prevailing, there is a chance of mites infestation in banana crop. Apply wettable sulphur 3 g/litre of water.

Tamil Nadu

9 mm (-80% large deficit) rainfall received over Kerala during 01 March - 21 April 2024. The extended range weather forecast (rainfall) for the next two weeks (19 - 25 April 2024 and 26 April - 02 May 2024) is below normal for week 1 and; week 2.

- Due to increased temperature and expected summer rains, provide propping to banana more than five months old to prevent them from lodging.
- Since continuous dry weather prevailed in some parts of the district is favorable for the early shoot borer attack in sugarcane. Hence, farmers are requested to do irrigation frequently and mulching if rain does not occur.
- Since continuous dry weather prevailed in some parts of the district is favourable for the early shoot borer attack in sugarcane hence farmers are requested to do irrigation frequently and do mulching if rain is not occurred.

Andhra Pradesh

1.4 mm (-93% large deficit) rainfall was received over Rayalaseema and 9 mm (-69% deficit) rainfall was received over Coastal Andhra during 01 March - 21 April 2024. The extended range weather forecast (rainfall) provided for the next two weeks (19 - 25 April 2024 and 26 April - 02 May 2024) is above normal rainfall over Rayalaseema and Costal Andhra Pradesh for week 1 and; below normal over Rayalaseema and Costal Andhra Pradesh for week-2.

- The present weather conditions are favourable for pinworms in tomato crop. To control by setting up 8 pheromone traps/acre and spray Spinetoram 11.70 % SC @1ml per litre of water.
- Farmers are advised to sow dhiancha or sun hemp green manure seed around the newly planted banana plants and at knee height stage or 50% flowering incorporate green manures in the soil, to improve the soil fertility and water holding capacity of the soil.
- Current dry weather conditions are congenial for fruit fly incidence in mango. To control fruit flies in mango, install methyl eugenol plywood traps @ 5 to 6 per acre during the fruit development stage till final harvest and, if necessary.

Karnataka

13 mm (-65% large deficit) rainfall was received over South Interior Karnataka, 28 mm (1% excess) Coastal Karnataka and 22 mm (-6% deficit) over North Interior Karnataka during 01 March - 21 April 2024. The extended range weather forecast (rainfall) provided for the next two weeks (19 - 25 April 2024 and 26 April - 02 May 2024) is above normal over North Interior Karnataka and Coastal Karnataka and South Interior Karnataka and for week 1 and; normal over North Interior Karnataka, South Interior Karnataka and Coastal Karnataka for week 2.

South Interior Karnataka

- Mulching (residual crop residue after harvesting of *rabi* and other crops) and one or two protective irrigation is recommended for mango and other horticultural crops to conserve soil moisture due to high temperatures and dry weather persisting over a long period.

- Mango fruit drop can be controlled by spraying Naphthalene acetic acid (NAA) @ 20 ppm twice at an interval of 15 days during the early stage (peanut stage/marble stage) of the fruit development stage.
- Under prevailing hot and dry weather conditions, farmers are advised for frequent irrigation for standing horticultural crops due to increasing temperatures day by day. Mulching is also advised to conserve soil moisture due to high temperatures and dry weather persisting over a long period.

North Interior Karnataka

- Summer ploughing can be taken up across the slope to incorporate crop residues in the soil, to conserve runoff water of pre-monsoon rainfall and reduce soil erosion.
- To manage bacterial blight disease in lime (fruit development stage), it is advised to spray the crop with 3 g Copper Oxy-chloride or 1 % Bordeaux mixture dissolved in one litre of water or 300 ppm Streptomycin (3 g in 10 litres of water).

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