

All India Coordinated Research Project on Agrometeorology (AICRPAM)

ICAR-Central Research Institute for Dryland Agriculture

Santoshnagar, Hyderabad – 500059

Weather Conditions and Agromet Advisories Issued during May 2018

1. General Weather Conditions

During 1 March - 30 May 2018, the country as a whole has received 115.7 mm rainfall, which is 10% Deficit, compared to the normal rainfall for the same period (129.1 mm). Out of 36 meteorological sub-divisions, rainfall was large excess in three meteorological sub-division; excess in 6; normal in 11; deficient in 13 and largely deficient in 3 subdivisions. The rainfall received during 1 March - 31 May 2018 is depicted in Fig. 1. The Southwest Monsoon hit Kerala coast on 29 May 2018. The southwest monsoon has further advanced into some parts of central Arabian Sea, remaining parts of Kerala, most parts of Coastal Karnataka and some parts of South Interior Karnataka and some more parts of interior Tamil Nadu. Conditions are favorable for further advance of Southwest Monsoon into some parts of northeastern states during next 48 hours.

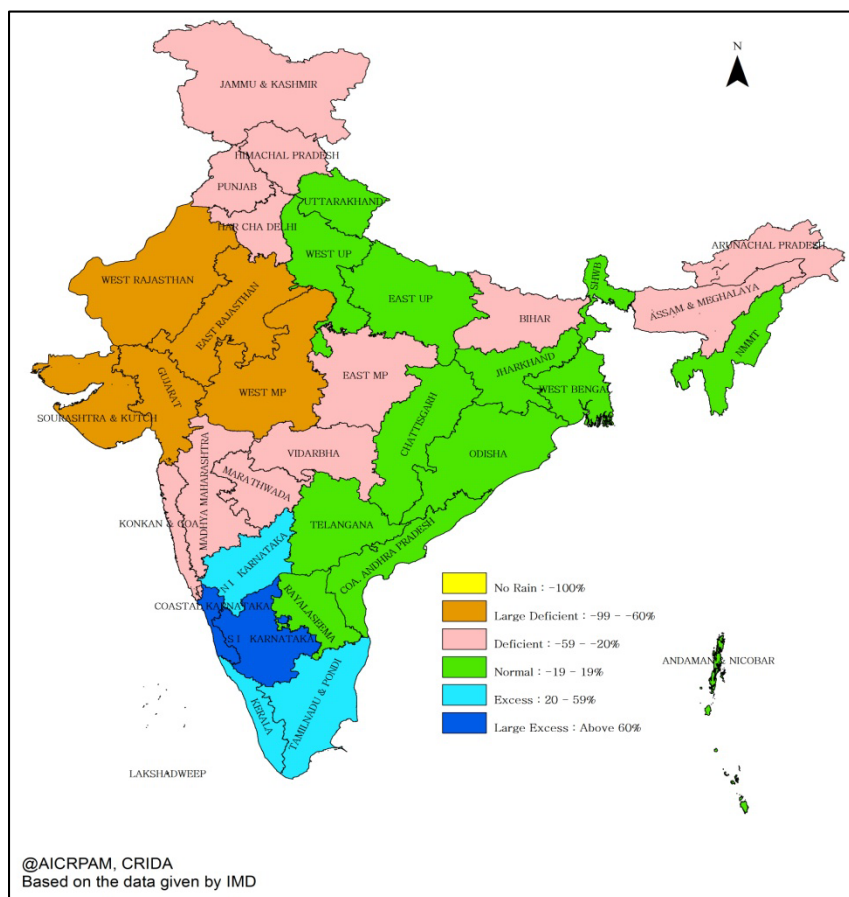


Fig. 1: Meteorological sub-divisional-wise rainfall received during 1 March - 31 May 2018

2. Agromet Advisories issued by centers of ICAR-All India Coordinated Research Project on Agrometeorology (AICRPAM) during May 2018

Date of issue	AICRPAM centre	Agromet Advisory issued
04-05-2018	Tamil Nadu	<ul style="list-style-type: none"> • Farmers are advised to do propping for Banana due to high wind speed and also to supply timely irrigation due to less rainfall forecasted. • Vaccine for foot and mouth disease to the cattle is advised as prophylactic measure by utilizing the facility from nearby veterinary hospital.
	Kerala	<ul style="list-style-type: none"> • Due to the increase in maximum temperature, farmers are advised to destroy the Spodoptra affected leafs in banana and apply Oberon at the rate of 0.75ml per one litre of water for mite attack in Chilli.
	Marathwada	<ul style="list-style-type: none"> • Evaporation rate is more due to this the soil moisture decreasing faster. Which affects on growth and development of sugarcane crop. Hence, the protective irrigation should be applied through drip irrigation method only during early in the morning or evening. • Due to increase in temperature, farmers are advised for irrigation management and mulching in Citrus and Pomegranate orchard.
	Chhattisgarh	<ul style="list-style-type: none"> • Water requirement of Citrus is high in these days, therefore field should be irrigated on daily basis. • Spray of Imidacloprid @ 8 ml per sprayer is important for control of red pumpkin beetle. • If chicks are being brought from hatchery then electrol powder should be given mixed with drinking water (@ 1-2 gram per litre). In case of large chickens, electrol drinking water should be given to the chickens during hot hours.
	Bihar	<ul style="list-style-type: none"> • 43% less rainfall is forecasted, therefore farmers are advised to continue irrigation in Summer crops. • Intercultural operation is advised in summer vegetable crops such as lady's finger, pumpkin, cucumber, sponge gourd etc. Use Sulpher based medicines in the crop like powdery asphyxia and spider pests in pumpkin, Cucumber, Nanua etc.
	Konkan	<ul style="list-style-type: none"> • To control red palm weevil affected coconut, prepare a slanting hole with the help of screw drill about 1 m height from ground level on tree trunk and pour about 20 ml of 36 % Monocrotophos or 20% Chlorpyrifos with the help of plastic funnel in the hole and close the hole with the help of cement. • If incidence of hopper, aphids and thrips on vegetable crops viz., brinjal, tomato, cabbage, chilli, knol knol etc., is noticed spray Malathion @ 20 ml or Dimethoate @ 12 ml per 10 litre of water. • Harvest the mature groundnut pods and dry them in sunshine for 4 to 5 days and store them in dry place.

11-05-2018	Vidarbha	<ul style="list-style-type: none"> • Maintain adequate moisture in the soil profile to reduce the impact of heat stress on summer crops with irrigation schedule at about 6 days interval, irrigating in the early morning or late afternoon. • Frequent light irrigation coupled with basin mulching (2 to 3 inch layer of organic mulch over the root zone and a few inches away from the trunk) is advisable in orange and mango orchards to reduce solar heat stress. • Provide proper ventilation and heat protection in the animal/poultry sheds. Applying gunny bags/grass on roof of shed with sprinkling of water is advisable to reduce heat impact. Restrict working/grazing of farm/draught animals to morning and evening hours and give them plenty of water to drink.
	Odisha	<ul style="list-style-type: none"> • Go for line sowing of rice followed by early beushening and weeding to avoid the rainfall required for transplanting, and over-aged seedlings, if transplanted late. • If there is availability of irrigation then farmers are advised to go for sowing of Cucurbits, Gourds, Beans, etc. • Harvest the matured Watermelon, Onion, Garlic along with matured Fruits like Mango, Litchi, Jackfruit, Pineapple, Pomegranate, Lemon.
	West Bengal	<ul style="list-style-type: none"> • Moderate to heavy rainfall is forecasted. Thus, farmers, are advised to transfer the harvested crops in a shaded place and those who have not harvested yet, kindly wait for few days. • In Jute, complete the intercultural operations and for crops of three-week stage, apply 6 to 7 Kg Urea (per bigha) as first top dressing and for crops of six-week stage apply the same amount of fertilizer as second top-dressing. To control weevil apply 2ml Endosulphan per litre of water.
	Madhya Pradesh	<ul style="list-style-type: none"> • Due to high temperature, farmers are advised to apply pest protection measures in tomatoes, egg plant and okra. For controlling sucking pests, spray of Malathion at 2 ml/litre water. For controlling caterpillar, spray of Triazaphos at 750 ml/500-600 litres of water. Apply insecticide after harvesting of fruits. Irrigate summer Moong and Urd at weekly intervals.
	Assam	<ul style="list-style-type: none"> • Sali Rice: Procure the seeds of high yielding varieties of Sali rice namely Ranjit, Bahadur, Satyaranjan, Basundhara, Kushal, Mahsuri, Bhogali, Rangilee, Ketekijoha etc. Select Satyaranjan and Basundhara in double cropping areas having crop duration of 130-135 days. Jalashree, Jalkunwari, Plawan are some suitable varieties of Sali rice for flood affected areas. • Colocasia : Farmers are advised to go for earthing-up in colocasia after 40-45 DAS preceded by weeding.
	Rajasthan	<ul style="list-style-type: none"> • Apply irrigation in fodder crops like maize, sorghum, bajra and cluster bean. Deep ploughing of fields after harvesting of rabi crops should be done as high temperature is prevailed which is suitable for killing insect's eggs and pupae and weed seeds. • Godowns should be properly cleaned and advised to spray 0.5 % malathion solution and keep the chamber closed for a week. • Control of stem and fruit borer in okra spray of malathion @ 2 ml or thiram @ 1 ml in one litre water. • Protect poultry birds from heat waves.

18-05-2018	Haryana	<ul style="list-style-type: none"> • Wheat: Don't burn heat straw in field as it creates environmental pollution and harmful for soil health. It is also a punishable offence. • Rice: Prepare the field for nurseries of rice crop with application of compost khad 10 to 12 cart per acre. • Farmers are advised to go for sowing of cotton crop, irrigation in moong and sugarcane and not apply irrigation for vegetables/ fruit crops. • Livestock: Keep animals inside of shade while high winds and aberrant weather. Provide clean drinking water sufficiently. Give shower to animals to overcome the heat stress and provide balanced feed.
	Punjab	<ul style="list-style-type: none"> • Vegetables/ Fruits: Onion thrips should be checked by spraying 250 ml Malathion 50 EC in 80 litres of water per acre. Do not spray during 7 days before harvest. Fruit borer attack in tomato crop can be checked by spraying 30 ml of Fame 480 SL or 600 ml of Carina 50 EC or Coragen 18.5 SC @ 60 ml per acre or 100 ml of Sumicidin 20 EC in 100 litres of water per acre. • For the management of early shoot borer in sugarcane, use Tricho-cards having 20,000 eggs of <i>Corcyra cephalonica</i> parasitized (seven days old) by <i>Trichogramma chilonis</i> per acre at 10 days interval. • Start the sowing of paddy nursery after 20th May. Grow recommended varieties of rice i.e. PR 127, PR 126, PR 124, PR 123, PR 122, PR 121, PR 114 and PR 113 etc. Flood the field and puddle it well. Soak 8 kg seed in 10 litres of water containing 20g Bavistin and 1g Streptocycline for 8 to 10 hours before sowing.
	Jharkhand	<ul style="list-style-type: none"> • Green gram - To conserve soil moisture for a longer period, intercultural operation (weeding) must be done. Timely sown crops are at flowering stage. therefore attack of Thrips at this stage is not uncommon which causes dropping of flowers from the plant. If such symptoms appears, spray the insecticide like Trizophos or Profenphos @ 1 ml. per liter of water. • Vegetable - Irrigate different vegetables at the regular interval. Before irrigation, weeding is essential. • Cattle - There is possibility of heat stroke in animals due to the prevailing high temperature during the day. Hence, animals should be protected against intense heat and should not allow them to expose in sunlight during noon and avail fresh and plenty of water for drinking. If the animals suffering with heat.
	Gujarat	<ul style="list-style-type: none"> • Harvesting of green gram and sesame is advised. • Vegetables: To control sucking pest in summer vegetables, spray neem seed extract 5% or neem seed oil 50 ml with acetamiprid 20% SP @ 5 g in 10 litres of water. Reduce irrigations interval in vegetables to avoid high temperature stress. • Protect the pearl millet crop from bird damage by bird scaring methods. • Livestock: Keep animals under shade or in sheds during noon hours of the day, provide cool water for drinking and shower them with cool water twice or thrice in a day.

	Bihar	<ul style="list-style-type: none"> • Fodder crops: Sowing of fodder crops such as sorghum, maize and bajra are advised due to the rainfall received during the last few days. • Spraying of Spinosad 48EC@1ml/4 litres of water is advised under clear sky condition, if pest population of fruit borer in tomato reaches ETL. • Turmeric: Sowing of turmeric crop from 15th May are advised due to the rainfall received during the last few days. Rajendra Sonia and Rajendra Sonali varieties are recommended for sowing in North • Bihar. Application of 25-30 tons of cowdung per hectare is advised before sowing. At the time of final land preparation, 60-75 kg nitrogen, 50-60 kg phosphorus, 100-120 kg potassium and 20-25 kg zinc sulphate per hectare is advised.
25-5-2018	Rajasthan	<ul style="list-style-type: none"> • Keeping in view of high temperature, farmers are advised for light irrigation as per requirement in all vegetable and standing crops. Irrigation should be done in the morning hours or in the evening hours. • Procure certified seeds for cotton sowing during the 1st week of June. The improve varieties of cotton are PA-255 (Desi cotton), WagadKalyan (American Cotton), Hybrid-8 and DCH-32(Hybrid cotton). • Deep ploughing of fields after harvesting of Rabi crops should be done as high temperature is prevailed which is suitable for killing insect's eggs and pupae and weed seeds. • Optimum moisture level should be maintained in cucurbitaceous crops by light and frequent irrigation as dry conditions may lead to poor pollination and thus drop in yield of the crop. • Protect poultry birds from heat.
	Madhya Pradesh	<ul style="list-style-type: none"> • Due to high temperature, farmers are advise to apply pest protection measures in tomatoes, egg plant and okra . For controlling sucking pests, spray of Malathion at 2 ml/litre water. For controlling caterpillar, spray of Triazaphos at 750 ml/500-600 litres of water. Apply insecticide after harvesting of fruits. • As mango fruit size is increasing, farmers are advised to apply spray of urea at 20 g/litre water to control fruit drop , and also to increase in fruit size. Apply irrigation in 20-25 days interval. • As day temperature is increasing, keep fresh water stock in the shed for drinking for the cattles and poultry birds. • Apply sprinkler irrigation over the shed of poultry houses.
	Punjab	<ul style="list-style-type: none"> • Intercultural operations for removing the weeds like kanghi buti, peeli buti, puth kanda etc growing on cotton field bunds, waste lands, road side and irrigation channels/canals to avoid further spread of whitefly to cotton field. • Control the weeds from the sugarcane crop. • To control the damage caused by tobacco caterpillar (Spodoptera litura) in summer moong, spray 800 g of Asataf 75 SP (acephate) or 1.5 litres of Dursban 20 EC (Chlorpyriphos) using 100 litres of water per acre with manually operated knapsack sprayer. • Onion thrips should be checked by spraying 250 ml Malathion 50 EC in 80 litres of water per acre. Do not spray during 7 days before harvest. • To avoid the adverse effect of hot weather on fruit trees, apply white-wash on the trunks of the trees if it is not done earlier.

	West Bengal	<ul style="list-style-type: none"> • Complete the intercultural operations and after that apply top dressing in Jute. For crops of three-week stage, apply 6 to 7 Kg Urea (per bigha) as first top dressing and for crops of six-week stage apply the same amount of fertilizer as second top-dressing. At present attack of jute semilooper, bihar hairy caterpillar and stem weevil is becoming severe. To control it, farmers are advised to apply Dichlorvos @3 ml per 4 litre of water or Endosulphan 2 ml per litre of water. • Timely sown sesame is now in pod development and maturity stage. To reduce pod borer infestation apply Endosulphan @2ml per litre of water. • In pumpkin, ridge-gourd, pointed gourd and cucumber, there is a chance of attack of Red-Pumpkin Beetle in the weather condition. To control the pest apply Dimecron or rogor (1ml per lt of water).
	Jammu	<ul style="list-style-type: none"> • Due to high evaporation and temperature, irrigate crop as per requirement and protect young fruit plants from heat by providing thatches /cover but ensure free circulation of air Hoeing and weeding may be taken up to conserve soil moisture and control weeds. • Apply carbaryl @ 2g/lt or cypermethrin @ 1ml/lt of water against pumpkin beetle. To control mosaics of cucurbits remove the vines of infected plants and spray imidacloprid @ 0.5% to control vectors and check the further spread.
	Bihar	<ul style="list-style-type: none"> • The adequate moisture in the soil due to the good rainfall since last few days may be utilized for sowing of turmeric crop from 15th May. • If infestation of fruit borer is found in tomato, installation of bird perches in tomato crop and hand picking of damaged fruit and burying are advised. • Farmers are advised to administer vaccination to their cattle against Foot and Mouth disease ten days after providing the medicine for worms. Give 50 gm common salt and 50 gm mineral mixture every day to animals.