



Composite Agromet Advisory Service Bulletin

FOR THE STATE OF MEGHALAYA

April 23rd, 2024
(For the period of 24th April to 28th April 2024)

Issued by
Meteorological Centre, Shillong
INDIA METEOROLOGICAL DEPARTMENT

In collaboration with
ICAR BARAPANI

As per IMD classification Meghalaya State consisting of eleven districts and it is part of Assam-Meghalaya meteorological subdivision

AGRO CLIMATIC ZONES FOR THE STATE OF MEGHALAYA

<i>Sl. No.</i>	<i>Agro climatic Zone</i>	<i>Districts</i>	<i>Agromet Field Unit (AMFU) Location</i>
1	Meghalaya	South West Garo Hills, West Garo Hills, East Garo Hills, North Garo Hills, South Garo Hills, East Khasi Hills, West Khasi Hills, South West Khasi Hills, RI- Bhoi, East Jaintia Hills, West Jaintia Hills.	ICAR Barapani

WEATHER SUMMARY FOR THE PERIOD SINCE 0830 HOURS IST OF APRIL 20th, 2024 TO 23th, 2024:

- *Summary of observations recorded Shillong, Sohra (Cherrapunjee), Barapani*

PARAMETERS	SHILLONG	SOHRA	BARAPANI
<i>Total Rainfall (mm)</i>	0.0	133.6	0.0
<i>Maximum Temp (°C)</i>	26.9	24.7	33.4
<i>Minimum Temp (°C)</i>	16.2	15.4	17.7
<i>Relative Humidity (%)</i>	85/28	96/73	85/20
<i>Maximum/Minimum</i>			

LOCAL FORECAST AND FARMERS WEATHER BULLETIN VALID UNTIL MORNING OF APRIL 20th, 2024:

- Light to Moderate rain is likely to occur at few places.
- Thunderstorm/Lightning accompanied with gusty wind of 30-40 Km/Hr is very likely at isolated places.

WEATHER INFORMATION FOR DIFFERENT DISTRICTS OF MEGHALAYA:

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1. RI-BHOI:

<i>Weather summary of the past four days</i>	<i>Weather forecast valid up to April 28th, 2024</i>
Sky was clear to partly cloudy with no rainfall. Maximum temperatures ranged between 29-33°C and minimum ranged between 16.6-22.6°C. Mean relative humidity was 63-92% in morning and 43-73% in evening. Wind speed ranged between 3.4-9.4 kmph.	There is possibility of 2 mm rainfall for the next five days. Maximum Temp: 31-32°C, Minimum Temp: 17-18°C, Maximum RH: 60-80%, Minimum RH: 21-32%, Wind speed: 6-8 kmph, Wind direction: E-SSW, Cloud cover: sky will be clear to mainly clear i.e., 0-2 Okta.

2. EAST KHASI HILLS:

<i>Weather summary of the past four days</i>	<i>Weather forecast valid up to April 28th, 2024</i>
MAWSYNRAM(Rainfall) 36.6 mm	There is possibility of 34 mm rainfall for the next five days. Maximum Temp: 28°C, Minimum Temp: 18-19°C, Maximum RH: 78-94%, Minimum RH: 44-57%, Wind speed: 9-11 kmph, Wind direction: SSW-SW, Cloud cover: sky will be mainly clear to mainly cloudy i.e., 2-5 Okta.

3. EAST JANTIA HILLS:

<i>Weather summary of the past four days</i>	<i>Weather forecast valid up to April 28th, 2024</i>
KHLIEHRIAT(Rainfall) Nil	There is possibility of 43 mm rainfall for the next five days. Maximum Temp: 31-32°C, Minimum Temp: 18-19°C, Maximum RH: 78-95%, Minimum RH: 44-62%, Wind speed: 12-15 kmph, Wind direction: SSW, Cloud cover: sky will be mainly clear to mainly cloudy i.e., 2-6 Okta.

4. EAST GARO HILLS:

<i>Weather summary of the past four days</i>	<i>Weather forecast valid up to April 28th, 2024</i>
WILLIAMNAGAR(Rainfall) Nil	There is possibility of 8 mm rainfall for the next five days. Maximum Temp: 31-34°C, Minimum Temp: 19°C, Maximum RH: 70-92%, Minimum RH: 20-35%, Wind speed: 8-9 kmph, Wind direction: SE-S, Cloud cover: sky will be mainly clear to partly cloudy i.e., 1-3 Okta.

5. NORTH GARO HILLS:

<i>Weather summary of the past four days</i>	<i>Weather forecast valid up to April 28th, 2024</i>
RESUBELPARA(Rainfall) Nil	There is possibility of 2 mm rainfall for the next five days. Maximum Temp: 31-33°C, Minimum Temp: 20-21°C, Maximum RH: 62-85%, Minimum RH: 15-35%, Wind speed: 8 kmph, Wind direction: E-SSE, Cloud cover: sky will be clear to mainly clear i.e., 0-2 Okta.

6. SOUTH GARO HILLS:

<i>Weather summary of the past four days</i>	<i>Weather forecast valid up to April 28th, 2024</i>
BAGHMARA(Rainfall) Nil	

7. SOUTH-WEST GARO HILLS:

<i>Weather summary of the past four days</i>	<i>Weather forecast valid up to April 28th, 2024</i>
AMPATI(Rainfall) Nil	There is possibility of 3 mm rainfall for the next five days. Maximum Temp: 34-36°C, Minimum Temp: 22-24°C, Maximum RH: 66-87%, Minimum RH: 14-22%, Wind speed: 8-11 Kmph, Wind direction: E-SSE, Cloud cover: sky will be clear to partly cloudy i.e., 0-3 Okta.

8. WEST GARO HILLS:

<i>Weather summary of the past four days</i>	<i>Weather forecast valid up to April 28th, 2024</i>
TURA(Rainfall) N/A	There is possibility of 3 mm rainfall for the next five days. Maximum Temp: 35-36°C, Minimum Temp: 20-22°C, Maximum RH: 64-88%, Minimum RH: 16-26%, Wind speed: 8-11 Kmph, Wind direction: E-SSE, Cloud cover: sky will be clear to partly cloudy i.e., 0-3 Okta.

9. WEST KHASI HILLS:

<i>Weather summary of the past four days</i>	<i>Weather forecast valid up to April 28th, 2024</i>
NONGSTOIN(Rainfall) Nil	There is possibility of 20 mm rainfall for the next five days. Maximum Temp: 29-32°C, Minimum Temp: 17-18°C, Maximum RH: 65-88%, Minimum RH: 28-44%, Wind speed: 11-13 Kmph, Wind direction: SSE-SW, Cloud cover: sky will be clear to partly cloudy i.e., 0-3 Okta.

10. SOUTH-WEST KHASI HILLS:

<i>Weather summary of the past four days</i>	<i>Weather forecast valid up to April 28th, 2024</i>
MAWKYRWAT(Rainfall) 6.0 mm	There is possibility of 59 mm rainfall for the next five days. Maximum Temp: 30-31°C, Minimum Temp: 17-18°C, Maximum RH: 74-93%, Minimum RH: 40-58%, Wind speed: 7-8 Kmph, Wind direction: ESE, Cloud cover: sky will be mainly clear to mainly cloudy i.e., 1-5 Okta.

11. WEST JAINTIA HILLS:

<i>Weather summary of the past four days</i>	<i>Weather forecast valid up to April 28th, 2024</i>
JOWAI (Rainfall) Nil	There is possibility of 19 mm rainfall for the next five days. Maximum Temp: 31-34°C, Minimum Temp: 20-22°C, Maximum RH: 75-90%, Minimum RH: 40-50%, Wind speed: 13-15 Kmph, Wind direction: SSW-SW, Cloud cover: sky will be mainly clear to partly cloudy i.e., 1-3 Okta.

Agro meteorological Advisories for coming 5 days

Main Crop	Stage	Pest/Diseases	Agricultural Advisories
Maize (High & Mid altitude Region)	Land preparation/ Sowing		<ul style="list-style-type: none"> Collect HYVs like Megha Maize 1, Vijay Composite, RCM 75, DA 61-A, Megha Maize-2, Vivek QPM-1, etc and keep ready for sowing. Ploughed 2-3 times to obtain a fine tilth. Furrow of 8-10cm should be made every 50 cm apart. Keep a channel of 25cm width × 15cm depth spaced at 8 m distance for draining out of excess rain. Incorporate organic manures like FYM @ 5t/ha in the field 15-20 days before sowing during ploughing. Sow 2 seeds per hill at a spacing of 50×25 cm followed by thinning at 10 days after germination & retaining one seedling per hill.
Cucurbits (Pumpkin/Bottle Gourd/ Ash Gourd/Squash/Cucumber/Bitter gourd)	Seed Sowing		<ul style="list-style-type: none"> Land Preparation: Prepare pits of 60cm x 60cm x 60cm size for sowing of bottle gourd & apply 2-3 kgs well rotten FYM in each pit along with neem cake (100g/pit). Spacing: Pumpkin/Bottle Gourd/ Ash Gourd/Squash Spacing: 3m (R-R) x 1.5m (P-P). Cucumber/Bitter gourd spacing: 1.5m (R-R) x 1m (P-P). Sow the seeds (2-3 per pit) 5-7 days after filling of pits. Pumpkin variety: ArkaChandan, ArkaSuryamukhi and Pusa Biswas. Bottle gourd variety: Pusa Summer, Prolific Long, Prolific Round, PusaMeghdoot, Pusa Hybrid 2, etc. Cucumber variety: Long Green, Malini, etc. Bitter gourd variety: Priya, PusaVishesh, etc. Maintain proper soil moisture after seed sowing by irrigation & mulching. Mulching with locally available materials like straw, grasses may be done to reduce evaporation losses.
French bean	Seed Sowing		<ul style="list-style-type: none"> Soil should be ploughed 2-3 times with power tiller or with spade. Planking is done during the last ploughing to make the soil bed friable for sowing. The seed should be sown at 2-3 cm depth in soil. Dwarf or bush types are sown with the spacing of row-to-row 40-50 cm and plant-to-plant at 10 cm while pole type at 60-65 cm x 10-12 cm. (a) Bush types: Contender, AnkaSubidha, Pant Anupama, ArkaKomal. (b) Pole types: Kentucky Wonder, Naga Local. FYM or compost @ 10 tonnes/ha should be incorporated in the soil during land preparation.
Brinjal/Chilli	Nursery raising/ Transplanting		<ul style="list-style-type: none"> Nursery seed bed preparation of 1 m width and length as per convenience and 15 cm above the ground. Beds to be ploughed and mixed with FYM @ 4 kg/m² and levelled it properly. Varieties of Brinjal: Arka Nidhi, ArkaNilkant and

		Damping off	<p>ArkaAnand, ArkaHarshita.</p> <ul style="list-style-type: none"> Varieties of Chilli: PusaJwala, PusaSadabahar, Pant C-1, Kashi Anmol. Seed treatment with <i>Trichoderma</i> or <i>Pseudomonas</i> @ 2-4 kg of seed before sowing. Sow the seed in line at 5 cm spacing and irrigate immediately if no rain. Avoid excess irrigation to control damping off diseases. Transplant brinjal at 60 x 45 cm spacing & chilli at 45 x 45 cm spacing. Irrigate immediately after transplanting in evening.
Strawberry	Harvesting & packaging		<ul style="list-style-type: none"> Harvest for the local market at the pink or three-fourths colour stage. Harvest the berries with the caps (or calyx) or pick special stem-grade fruit by picking the stem one to two inches from the calyx.
Khasi Mandarin	Fruit set/ New plantation		<ul style="list-style-type: none"> Spray of micronutrients. Lay out and pit digging on half-moon terraces.
Pineapple	Flowering		<ul style="list-style-type: none"> Application of FYM @ 500 g/pit, P₂O₅ (4 g /plant) and 1st dose K₂O (6 g /plant).
Banana	New plantation		<ul style="list-style-type: none"> Lay out and pit digging on half-moon terraces.
Guava	Fruit growth		<ul style="list-style-type: none"> Fertilizer application in bearing trees (>5 yr. old). Soil application of Urea 700 g, SSP 600 g and MOP 250 g. The fertilizers are applied into ring 20-25 cm wide and 10-15 cm depths around the basin under the canopy of the tree keeping 15-20 cm space from the main stem and it is mixed by light hoeing. Spray of micronutrients.
Animal Sciences			
Poultry	All stages		<ul style="list-style-type: none"> Broilers suffer most during summer because of their lack of sweat glands, feathered body and the high amount of fat below the skin. Improper design of poultry houses, greater width, side walls higher than the prescribed level, construction of houses closer to each other, asbestos or tiled roofing, high density of stock, etc., will increase heat build-up within the house and add to the summer stress Ridge ventilation, provision of exhaust fans, ceiling or pedestal fans will help in eliminating the excess heat accumulated in the building. Insulation of walls, provision of false roofing, or the spreading of coir or paddy straw on the roof, will be immensely helpful in areas where the summer is very severe. If the higher temperature is accompanied by relatively high humidity in the air, heat loss from evaporation by the birds is reduced. Spraying water on the birds is therefore not advisable in areas near the seashore. Sprinkling water on the roof, however, will help to bring down the house temperature during the day when the temperature reaches its peak. Remove the feeders during the hot hours and allow feeding only during the early morning and late in the evening. Night lighting may be continued throughout the summer months to facilitate feed intake. Ascorbic acid (Vitamin C @ 10 mg/kg of body weight), acetylsalicylic acid or chlorpromazine hydrochloride may be added to the water to reduce the stress. Provision of B-complex vitamins and electrolytes in the water will also be helpful in alleviating summer stress of the birds. The litter material should be changed frequently to prevent building up of ammonia.
Piggery	All stages		<ul style="list-style-type: none"> Pigs lack the ability to sweat and have relatively small

			<p>lungs for their body size, making it difficult for them to remove excess internal heat. They also have a thick layer of subcutaneous fat, which provides useful insulation in cold weather but makes thermal regulation in hot weather more difficult.</p> <ul style="list-style-type: none"> • Feed when temperatures are lowest in the early morning or evening • Overcrowding of pigs will have a greater impact in the summer. Adequate space to reduce fighting and improve pig performance is more critical in warmer weather. • In summer, sprinklers, wallowing tanks etc. may be provided in addition to shades to cool pigs. • Fans or exhaust fans may be provided in the shed. • Adequate measure should be taken for flies control.
Cattle	All stages		<ul style="list-style-type: none"> • Care should be taken to prevent diseases due to sudden changes in weather. • Fly and tick control efforts may be initiated as they prevent the vector-borne disease from spread. • Draught cattle should be tied in the shade from afternoon to evening. • Provision of water in clean troughs at least 4 times during the day should be ensured. • Male animals may get agitated due to the heat, so special care should be given by livestock rearers. • The windows inside the sheds may be kept open for proper ventilation.
Fishery			
All fish varieties	All Stages		<ul style="list-style-type: none"> • Remove the old stock and make the pond ready for new stock before rain. • Maintain the water pH at 7.5 to 8.5 by liming @ 250 kg/ha. (Soak the lime in water for a night and then apply next day) properly as per the recommended doses. • Apply cowdung @ 5 MT/ha to improve pond fertility.

Suggestion: Contact nearby State Agril. Staff or KVK staff for necessary help and suggestion.