



**ICAR Research Complex for N.E.H. Region
Manipur Centre, Lamphelpat, Imphal - 795 004**



“Integrated Agromet Advisory Services”

MANIPUR BULLETIN

26th March, 2013

Bishnupur

IAAS, ICAR-RC Manipur Centre in association with India Meteorological Department, Regional Meteorological Centre, Guwahati and Northern Hemisphere Analysis Centre, New Delhi, Ministry of Earth Science, Govt. of India reports the weather forecasts for the next five days, i.e., from 27th to 31st March, 2013 as given below:

<p><u>Significant past weather for the preceding bi-weekly of Imphal - West (22nd to 25th March, 2013)</u></p> <p>During the past four days the sky was partly cloudy to cloudy but mainly clear during morning hours of 23 and afternoon hours of 24 March. 11.0 mm rainfall was recorded during past four days. Maximum temperature range observed was 28.0 – 28.8 °C, range of minimum temperature observed was 8.1 – 15.2 °C, mean relative humidity observed in morning and afternoon were 79.0 % and 35.25 % respectively. The average wind speed range was 2.3 – 6.8 km/hr.</p>	<p><u>Weather forecast for next five days of Bishnupur (27th to 31st March, 2013)</u></p> <p>There is likely to have thundery showers during next five days. The sky is likely to be mainly clear to partly cloudy during next five days. The maximum temp. is likely to be 28.0 - 32.0 °C. The minimum temp. is likely to be 11.0 – 14.0 °C. The maximum RH is likely to attain a max value of 86 %. Minimum RH is likely to reach a max of 52 %. The average wind speed during next five days may reach upto max. value of 4 km/hr.</p>
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CLOUDS: Kalpana- 1Cloud imagery at 0530 hours IST shows low/medium clouds over some parts of northeastern states.

Weather Forecast for next 3 days (upto 0830 hours IST of 28th March, 2013)

Rain/thundershowers would occur at a few places Manipur.

Weather Warning during next 3 days

Thundersquall would occur at one or two places over Manipur during next 24 hours.

Weather Outlook for subsequent 4 days from 29th March to 2nd April, 2013

Rain/thundershowers would occur at one or two places over northeastern states.

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
Field Crops			
Rice	Pre- Kharif rice		<ul style="list-style-type: none"> * Maintain 5-8cm of water level in fields where seedlings from dry nursery was transplanted. * In wet nursery: <ul style="list-style-type: none"> - Uprooting of seedlings may be done when seedlings are 30-45 days old. - Seedlings should be transplanted within two days of uprooting.
Maize	Vegetative	- Shoot borer	<ul style="list-style-type: none"> - 60 kg of Nitrogen fertilizer per ha is recommended at the time of inter-culture operation at knee-high stage. - Apply 2-3 granules of Furadan 3G at the whorl of each plant.
Rapeseed	Harvesting		- Mature crop may be harvested. After harvesting, it must be sun dried for 2-3 days and threshed. Cleaned seeds must be packed and stored in wooden rack.
Field Pea	Harvesting		- Harvest the mature pods. Pods selected for seed for next season may be sun dried for 2-3 days.
Storage			- Seeds must be stored in RC-seed bins after proper drying. Check for germination of seeds or fungal growth. Clean and dry the seeds.
Horticulture Crops			
Turmeric/ Ginger	Rhizome selection & sowing		<ul style="list-style-type: none"> - Sort out healthy disease free rhizome seed and treat them with Carbendazim and an insecticide before sowing. Let it dry (in case of wet solution treatment) then sow. - Maintain 3-4 inches depth while sowing. Rhizome finger of 25-30 gm with 2-3 buds may be sown. Mother rhizome can also be used as seed by cutting into pieces with 2-3 buds.



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“Integrated Agromet Advisory Services”

Tuber crops	Land preparation to sowing		<ul style="list-style-type: none">- In foothills and upland area, colocassia, tapioca and sweet potato. Prepare bed (at slope land: mound/ ridge method and in plain- flat method).- Select 25-30 gm weight sett having 2-3 buds and treat it in Trichoderma solution (20g/1kg FYM slurry) for ½ hr or other pesticide to protect from corm weevil- Spacing: a) 90cm x 90cm for tapioca, b) 45cm x 45cm for sweet potato and c) 45cm x 60cm for colocassia.
Cucurbits	Vegetative		<ul style="list-style-type: none">- Red pumpkin beetle starts affecting the crop as soon as plant starts bearing leaves. Use Methyl Eugenol as trap @ 10 traps/ sangam.
Tomato	Vegetative to flowering		<p>In tomato foliar fertilization of nitrogen is very much effective. In a hectare crop area, it may be done as follows:</p> <ul style="list-style-type: none">▪ For 30 days old crop : 9.71 kg Urea in 1000 lit of water▪ For 40 days old crop : 14.4 kg Urea in 1500 lit of water▪ For 50 days old crop : 19.3 kg Urea in 2000 lit of water
Animal Sciences			
Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
Pig	Above 3 months of age	Swine Fever	<ul style="list-style-type: none">- Vaccinate with <i>Swine Fever</i> vaccine as per prescribed dose.- Give vitamins like Feroliv @ 10-20 ml twice daily in feed.
		Deworming	Deworm using Panacur tab @ 1.5mg/10kg body weight.
Cattle / Buffalo/ Mithun	All age groups except three months or below	B.Q. and Haemorrhagic Septicaemia	<ul style="list-style-type: none">- Vaccination of B.Q. and H.S. polyvalent (dose as per recommendation) is advised.- Provide mineral mixture like Minamil @ 5-10g once daily along with the feed.
Goat	All susceptible age groups	B.Q. and H.S.	<ul style="list-style-type: none">- Vaccination of B.Q. and H.S. (dose as per recommendation) is advised.
Poultry	All susceptible age groups	Ranikhet Disease	<ul style="list-style-type: none">- By the end of winter and before summer sets in, birds should be vaccinated against <i>Ranikhet disease</i>.
		<i>Coccidiosis</i>	<ul style="list-style-type: none">- Poultry must be provided <i>Coccidiostat/ Supercox</i> (@ 1g/lit of drinking water) for 5 to 7 days- Provide Calcium preparation like Supercare @ 50ml/100 birds
		Deworming	Deworm with Piperazine liquid @ 50ml/100 birds
Fisheries			
Type of Farming	Stage	Field	Agro-metrological advisories
Carp culture	Common carp & grass carp brooders	Pond and water	Water depth should be maintained at 1.5 - 2.0 m
		Feed	Feeds should be provided 2 times a day @ 2-3% body weight per day.
		Fish	Male and female brooders should be stock in separate ponds. Brooders of 2-3 years old having more than 1kg should be selected for seed production.
		Feed	Feed should be provided @ 1-2% body weight per day. Feed can be fed 2 times a day.
	Breeding	pond	<ul style="list-style-type: none">▪ Pond should be free from insects, predators, aquatic weeds etc.▪ Water should be clean, clear having pH, 7.0-7.5; dissolved oxygen 6-8ppm, carbon dioxide –nil.▪ Hormone like ovaprim, ovatide or Wova-FH may be injected @ 0.5ml/kg fish for breeding in both the brooders of common carp.▪ Hormone like ovaprim, ovatide or Wova-FH may be injected @ 0.5ml/kg fish for breeding in both the brooders of grass carp.
	Nurseries	ponds	<p>Water depth should be maintained at 1.0m</p> <p>After liming nursery ponds should be fertilized prior 15 days of spawn stocking.</p> <p>Feeding should be done 2-3 times a day @5-10% body weight/day.</p>



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“Integrated Agromet Advisory Services”

AMFU- Imphal Unit



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MANIPUR BULLETIN

26th March, 2013

Chandel

IAAS, ICAR-RC Manipur Centre in association with India Meteorological Department, Regional Meteorological Centre, Guwahati and Northern Hemisphere Analysis Centre, New Delhi, Ministry of Earth Science, Govt. of India reports the weather forecasts for the next five days, i.e., from 27th to 31st March, 2013 as given below:

<p><u>Significant past weather for the preceding bi-weekly of Imphal - West (22nd to 25th March, 2013)</u></p> <p>During the past four days the sky was partly cloudy to cloudy but mainly clear during morning hours of 23 and afternoon hours of 24 March. 11.0 mm rainfall was recorded during past four days. Maximum temperature range observed was 28.0 – 28.8 °C, range of minimum temperature observed was 8.1 – 15.2 °C, mean relative humidity observed in morning and afternoon were 79.0 % and 35.25 % respectively. The average wind speed range was 2.3 – 6.8 km/hr.</p>	<p><u>Weather forecast for next five days of Chandel (27th to 31st March, 2013)</u></p> <p>There is likely to have thundery showers during next five days. The sky is likely to be mainly clear to partly cloudy during next five days. The maximum temp. is likely to be 29.0 - 32.0 °C. The minimum temp. is likely to be 12.0 – 16.0 °C. The maximum RH is likely to attain a max value of 75 %. Minimum RH is likely to reach a max of 35 %. The average wind speed during next five days may reach upto max. value of 5 km/hr.</p>
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CLOUDS: Kalpana- 1Cloud imagery at 0530 hours IST shows low/medium clouds over some parts of northeastern states.

Weather Forecast for next 3 days (upto 0830 hours IST of 28th March, 2013)

Rain/thundershowers would occur at a few places Manipur.

Weather Warning during next 3 days

Thundersquall would occur at one or two places over Manipur during next 24 hours.

Weather Outlook for subsequent 4 days from 29th March to 2nd April, 2013

Rain/thundershowers would occur at one or two places over northeastern states.

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
Field Crops			
Rice	Pre- Kharif rice		* Maintain 5-8cm of water level in fields where seedlings from dry nursery was transplanted.
			* In wet nursery: - Uprooting of seedlings may be done when seedlings are 30-45 days old. - Seedlings should be transplanted within two days of uprooting.
Maize	Vegetative	- Shoot borer	- 60 kg of Nitrogen fertilizer per ha is recommended at the time of inter-culture operation at knee-high stage. - Apply 2-3 granules of Furadan 3G at the whorl of each plant.
Rapeseed	Harvesting		- Mature crop may be harvested. After harvesting, it must be sun dried for 2-3 days and threshed. Cleaned seeds must be packed and stored in wooden rack.
Field Pea	Harvesting		- Harvest the mature pods. Pods selected for seed for next season may be sun dried for 2-3 days.
Storage			- Seeds must be stored in RC-seed bins after proper drying. Check for germination of seeds or fungal growth. Clean and dry the seeds.
Horticulture Crops			
Turmeric/ Ginger	Rhizome selection & sowing		- Sort out healthy disease free rhizome seed and treat them with Carbendazim and an insecticide before sowing. Let it dry (in case of wet solution treatment) then sow. - Maintain 3-4 inches depth while sowing. Rhizome finger of 25-30 gm with 2-3 buds may be sown. Mother rhizome can also be used as seed by cutting into pieces with 2-3 buds.



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Tuber crops	Land preparation to sowing		<ul style="list-style-type: none"> - In foothills and upland area, colocassia, tapioca and sweet potato. Prepare bed (at slope land: mound/ ridge method and in plain- flat method). - Select 25-30 gm weight sett having 2-3 buds and treat it in Trichoderma solution (20g/1kg FYM slurry) for ½ hr or other pesticide to protect from corm weevil - Spacing: a) 90cm x 90cm for tapioca, b) 45cm x 45cm for sweet potato and c) 45cm x 60cm for colocassia.
Cucurbits	Vegetative		<ul style="list-style-type: none"> - Red pumpkin beetle starts affecting the crop as soon as plant starts bearing leaves. Use Methyl Eugenol as trap @ 10 traps/ sangam.
Tomato	Vegetative to flowering		<p>In tomato foliar fertilization of nitrogen is very much effective. In a hectare crop area, it may be done as follows:</p> <ul style="list-style-type: none"> ▪ For 30 days old crop : 9.71 kg Urea in 1000 lit of water ▪ For 40 days old crop : 14.4 kg Urea in 1500 lit of water ▪ For 50 days old crop : 19.3 kg Urea in 2000 lit of water

Animal Sciences

Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
Pig	Above 3 months of age	Swine Fever	<ul style="list-style-type: none"> - Vaccinate with <i>Swine Fever</i> vaccine as per prescribed dose. - Give vitamins like Feroliv @ 10-20 ml twice daily in feed.
		Deworming	Deworm using Panacur tab @ 1.5mg/10kg body weight.
Cattle / Buffalo/ Mithun	All age groups except three months or below	B.Q. and Haemorrhagic Septicaemia	<ul style="list-style-type: none"> - Vaccination of B.Q. and H.S. polyvalent (dose as per recommendation) is advised. - Provide mineral mixture like Minamil @ 5-10g once daily along with the feed.
Goat	All susceptible age groups	B.Q. and H.S.	- Vaccination of B.Q. and H.S. (dose as per recommendation) is advised.
Poultry	All susceptible age groups	Ranikhet Disease	- By the end of winter and before summer sets in, birds should be vaccinated against <i>Ranikhet disease</i> .
		<i>Coccidiosis</i>	<ul style="list-style-type: none"> - Poultry must be provided <i>Coccidiostat/ Supercox</i> (@ 1g/lit of drinking water) for 5 to 7 days - Provide Calcium preparation like Supercare @ 50ml/100 birds
		Deworming	Deworm with Piperazine liquid @ 50ml/100 birds

Fisheries

Type of Farming	Stage	Field	Agro-metrological advisories
Carp culture	Common carp & grass carp brooders	Pond and water	Water depth should be maintained at 1.5 - 2.0 m
		Feed	Feeds should be provided 2 times a day @ 2-3% body weight per day.
		Fish	Male and female brooders should be stock in separate ponds. Brooders of 2-3 years old having more than 1kg should be selected for seed production.
		Feed	Feed should be provided @ 1-2% body weight per day. Feed can be fed 2 times a day.
	Breeding	pond	<ul style="list-style-type: none"> ▪ Pond should be free from insects, predators, aquatic weeds etc. ▪ Water should be clean, clear having pH, 7.0-7.5; dissolved oxygen 6-8ppm, carbon dioxide –nil. ▪ Hormone like ovaprim, ovatide or Wova-FH may be injected @ 0.5ml/kg fish for breeding in both the brooders of common carp. ▪ Hormone like ovaprim, ovatide or Wova-FH may be injected @ 0.5ml/kg fish for breeding in both the brooders of grass carp.
	Nurseries	ponds	<p>Water depth should be maintained at 1.0m</p> <p>After liming nursery ponds should be fertilized prior 15 days of spawn stocking.</p> <p>Feeding should be done 2-3 times a day @5-10% body weight/day.</p>



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26th March, 2013

Churachandpur

IAAS, ICAR-RC Manipur Centre in association with India Meteorological Department, Regional Meteorological Centre, Guwahati and Northern Hemisphere Analysis Centre, New Delhi, Ministry of Earth Science, Govt. of India reports the weather forecasts for the next five days, i.e., from 27th to 31st March, 2013 as given below:

<p><u>Significant past weather for the preceding bi-weekly of Imphal - West (22nd to 25th March, 2013)</u></p> <p>During the past four days the sky was partly cloudy to cloudy but mainly clear during morning hours of 23 and afternoon hours of 24 March. 11.0 mm rainfall was recorded during past four days. Maximum temperature range observed was 28.0 – 28.8 °C, range of minimum temperature observed was 8.1 – 15.2 °C, mean relative humidity observed in morning and afternoon were 79.0 % and 35.25 % respectively. The average wind speed range was 2.3 – 6.8 km/hr.</p>	<p><u>Weather forecast for next five days of Churachandpur (27th to 31st March, 2013)</u></p> <p>There is likely to have thundery showers during next five days. The sky is likely to be mainly clear to partly cloudy during next five days. The maximum temp. is likely to be 27.0 - 31.0 °C. The minimum temp. is likely to be 10.0 – 14.0 °C. The maximum RH is likely to attain a max value of 75 %. Minimum RH is likely to reach a max of 47 %. The average wind speed during next five days may reach upto max. value of 6 km/hr.</p>
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Weather Forecast for next 3 days (upto 0830 hours IST of 28th March, 2013)

Rain/thundershowers would occur at a few places Manipur.

Weather Warning during next 3 days

Thundersquall would occur at one or two places over Manipur during next 24 hours.

Weather Outlook for subsequent 4 days from 29th March to 2nd April, 2013

Rain/thundershowers would occur at one or two places over northeastern states.

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
Field Crops			
Rice	Pre- Kharif rice		<ul style="list-style-type: none"> * Maintain 5-8cm of water level in fields where seedlings from dry nursery was transplanted. * In wet nursery: <ul style="list-style-type: none"> - Uprooting of seedlings may be done when seedlings are 30-45 days old. - Seedlings should be transplanted within two days of uprooting.
Maize	Vegetative	- Shoot borer	<ul style="list-style-type: none"> - 60 kg of Nitrogen fertilizer per ha is recommended at the time of inter-culture operation at knee-high stage. - Apply 2-3 granules of Furadan 3G at the whorl of each plant.
Rapeseed	Harvesting		- Mature crop may be harvested. After harvesting, it must be sun dried for 2-3 days and threshed. Cleaned seeds must be packed and stored in wooden rack.
Field Pea	Harvesting		- Harvest the mature pods. Pods selected for seed for next season may be sun dried for 2-3 days.
Storage			- Seeds must be stored in RC-seed bins after proper drying. Check for germination of seeds or fungal growth. Clean and dry the seeds.
Horticulture Crops			
Turmeric/ Ginger	Rhizome selection & sowing		<ul style="list-style-type: none"> - Sort out healthy disease free rhizome seed and treat them with Carbendazim and an insecticide before sowing. Let it dry (in case of wet solution treatment) then sow. - Maintain 3-4 inches depth while sowing. Rhizome finger of 25-30 gm with 2-3 buds may be sown. Mother rhizome can also be used as seed by cutting into pieces with 2-3 buds.



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Manipur Centre, Lamphelpat, Imphal - 795 004



“Integrated Agromet Advisory Services”

Tuber crops	Land preparation to sowing		<ul style="list-style-type: none"> - In foothills and upland area, colocassia, tapioca and sweet potato. Prepare bed (at slope land: mound/ ridge method and in plain- flat method). - Select 25-30 gm weight sett having 2-3 buds and treat it in Trichoderma solution (20g/1kg FYM slurry) for ½ hr or other pesticide to protect from corm weevil - Spacing: a) 90cm x 90cm for tapioca, b) 45cm x 45cm for sweet potato and c) 45cm x 60cm for colocassia.
Cucurbits	Vegetative		<ul style="list-style-type: none"> - Red pumpkin beetle starts affecting the crop as soon as plant starts bearing leaves. Use Methyl Eugenol as trap @ 10 traps/ sangam.
Tomato	Vegetative to flowering		<p>In tomato foliar fertilization of nitrogen is very much effective. In a hectare crop area, it may be done as follows:</p> <ul style="list-style-type: none"> ▪ For 30 days old crop : 9.71 kg Urea in 1000 lit of water ▪ For 40 days old crop : 14.4 kg Urea in 1500 lit of water ▪ For 50 days old crop : 19.3 kg Urea in 2000 lit of water

Animal Sciences

Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
Pig	Above 3 months of age	Swine Fever	<ul style="list-style-type: none"> - Vaccinate with <i>Swine Fever</i> vaccine as per prescribed dose. - Give vitamins like Feroliv @ 10-20 ml twice daily in feed.
		Deworming	Deworm using Panacur tab @ 1.5mg/10kg body weight.
Cattle / Buffalo/ Mithun	All age groups except three months or below	B.Q. and Haemorrhagic Septicaemia	<ul style="list-style-type: none"> - Vaccination of B.Q. and H.S. polyvalent (dose as per recommendation) is advised. - Provide mineral mixture like Minamil @ 5-10g once daily along with the feed.
Goat	All susceptible age groups	B.Q. and H.S.	- Vaccination of B.Q. and H.S. (dose as per recommendation) is advised.
Poultry	All susceptible age groups	Ranikhet Disease	- By the end of winter and before summer sets in, birds should be vaccinated against <i>Ranikhet disease</i> .
		<i>Coccidiosis</i>	<ul style="list-style-type: none"> - Poultry must be provided <i>Coccidiostat/ Supercox</i> (@ 1g/lit of drinking water) for 5 to 7 days - Provide Calcium preparation like Supercare @ 50ml/100 birds
		Deworming	Deworm with Piperazine liquid @ 50ml/100 birds

Fisheries

Type of Farming	Stage	Field	Agro-metrological advisories
Carp culture	Common carp & grass carp brooders	Pond and water	Water depth should be maintained at 1.5 - 2.0 m
		Feed	Feeds should be provided 2 times a day @ 2-3% body weight per day.
		Fish	Male and female brooders should be stock in separate ponds. Brooders of 2-3 years old having more than 1kg should be selected for seed production.
		Feed	Feed should be provided @ 1-2% body weight per day. Feed can be fed 2 times a day.
	Breeding	pond	<ul style="list-style-type: none"> ▪ Pond should be free from insects, predators, aquatic weeds etc. ▪ Water should be clean, clear having pH, 7.0-7.5; dissolved oxygen 6-8ppm, carbon dioxide –nil. ▪ Hormone like ovaprim, ovatide or Wova-FH may be injected @ 0.5ml/kg fish for breeding in both the brooders of common carp. ▪ Hormone like ovaprim, ovatide or Wova-FH may be injected @ 0.5ml/kg fish for breeding in both the brooders of grass carp.
	Nurseries	ponds	<p>Water depth should be maintained at 1.0m</p> <p>After liming nursery ponds should be fertilized prior 15 days of spawn stocking.</p> <p>Feeding should be done 2-3 times a day @5-10% body weight/day.</p>



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MANIPUR BULLETIN

26th March, 2013

Imphal-East

IAAS, ICAR-RC Manipur Centre in association with India Meteorological Department, Regional Meteorological Centre, Guwahati and Northern Hemisphere Analysis Centre, New Delhi, Ministry of Earth Science, Govt. of India reports the weather forecasts for the next five days, i.e., from 27th to 31st March, 2013 as given below:

<p><u>Significant past weather for the preceding bi-weekly of Imphal - West (22nd to 25th March, 2013)</u></p> <p>During the past four days the sky was partly cloudy to cloudy but mainly clear during morning hours of 23 and afternoon hours of 24 March. 11.0 mm rainfall was recorded during past four days. Maximum temperature range observed was 28.0 – 28.8 °C, range of minimum temperature observed was 8.1 – 15.2 °C, mean relative humidity observed in morning and afternoon were 79.0 % and 35.25 % respectively. The average wind speed range was 2.3 – 6.8 km/hr.</p>	<p><u>Weather forecast for next five days of Imphal - East (27th to 31st March, 2013)</u></p> <p>There is likely to have thundery showers during next five days. The sky is likely to be mainly clear to partly cloudy during next five days. The maximum temp. is likely to be 27.0 - 31.0 °C. The minimum temp. is likely to be 10.0 – 14.0 °C. The maximum RH is likely to attain a max value of 85 %. Minimum RH is likely to reach a max of 46 %. The average wind speed during next five days may reach upto max. value of 2 km/hr.</p>
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Weather Forecast for next 3 days (upto 0830 hours IST of 28th March, 2013)

Rain/thundershowers would occur at a few places Manipur.

Weather Warning during next 3 days

Thundersquall would occur at one or two places over Manipur during next 24 hours.

Weather Outlook for subsequent 4 days from 29th March to 2nd April, 2013

Rain/thundershowers would occur at one or two places over northeastern states.

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
Field Crops			
Rice	Pre- Kharif rice		* Maintain 5-8cm of water level in fields where seedlings from dry nursery was transplanted.
			* In wet nursery: - Uprooting of seedlings may be done when seedlings are 30-45 days old. - Seedlings should be transplanted within two days of uprooting.
Maize	Vegetative	- Shoot borer	- 60 kg of Nitrogen fertilizer per ha is recommended at the time of inter-culture operation at knee-high stage. - Apply 2-3 granules of Furadan 3G at the whorl of each plant.
Rapeseed	Harvesting		- Mature crop may be harvested. After harvesting, it must be sun dried for 2-3 days and threshed. Cleaned seeds must be packed and stored in wooden rack.
Field Pea	Harvesting		- Harvest the mature pods. Pods selected for seed for next season may be sun dried for 2-3 days.
Storage			- Seeds must be stored in RC-seed bins after proper drying. Check for germination of seeds or fungal growth. Clean and dry the seeds.
Horticulture Crops			
Turmeric/ Ginger	Rhizome selection & sowing		- Sort out healthy disease free rhizome seed and treat them with Carbendazim and an insecticide before sowing. Let it dry (in case of wet solution treatment) then sow. - Maintain 3-4 inches depth while sowing. Rhizome finger of 25-30 gm with 2-3 buds may be sown. Mother rhizome can also be used as seed by cutting into pieces with 2-3 buds.



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Tomato	Vegetative to flowering		<p>In tomato foliar fertilization of nitrogen is very much effective. In a hectare crop area, it may be done as follows:</p> <ul style="list-style-type: none"> ▪ For 30 days old crop : 9.71 kg Urea in 1000 lit of water ▪ For 40 days old crop : 14.4 kg Urea in 1500 lit of water ▪ For 50 days old crop : 19.3 kg Urea in 2000 lit of water

Animal Sciences

Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
Pig	Above 3 months of age	Swine Fever	<ul style="list-style-type: none"> - Vaccinate with <i>Swine Fever</i> vaccine as per prescribed dose. - Give vitamins like Feroliv @ 10-20 ml twice daily in feed.
		Deworming	Deworm using Panacur tab @ 1.5mg/10kg body weight.
Cattle / Buffalo/ Mithun	All age groups except three months or below	B.Q. and Haemorrhagic Septicaemia	<ul style="list-style-type: none"> - Vaccination of B.Q. and H.S. polyvalent (dose as per recommendation) is advised. - Provide mineral mixture like Minamil @ 5-10g once daily along with the feed.
Goat	All susceptible age groups	B.Q. and H.S.	- Vaccination of B.Q. and H.S. (dose as per recommendation) is advised.
Poultry	All susceptible age groups	Ranikhet Disease	- By the end of winter and before summer sets in, birds should be vaccinated against <i>Ranikhet disease</i> .
		<i>Coccidiosis</i>	<ul style="list-style-type: none"> - Poultry must be provided <i>Coccidiostat/ Supercox</i> (@ 1g/lit of drinking water) for 5 to 7 days - Provide Calcium preparation like Supercare @ 50ml/100 birds
		Deworming	Deworm with Piperazine liquid @ 50ml/100 birds

Fisheries

Type of Farming	Stage	Field	Agro-metrological advisories
Carp culture	Common carp & grass carp brooders	Pond and water	Water depth should be maintained at 1.5 - 2.0 m
		Feed	Feeds should be provided 2 times a day @ 2-3% body weight per day.
		Fish	Male and female brooders should be stock in separate ponds. Brooders of 2-3 years old having more than 1kg should be selected for seed production.
		Feed	Feed should be provided @ 1-2% body weight per day. Feed can be fed 2 times a day.
	Breeding	pond	<ul style="list-style-type: none"> ▪ Pond should be free from insects, predators, aquatic weeds etc. ▪ Water should be clean, clear having pH, 7.0-7.5; dissolved oxygen 6-8ppm, carbon dioxide –nil. ▪ Hormone like ovaprim, ovatide or Wova-FH may be injected @ 0.5ml/kg fish for breeding in both the brooders of common carp. ▪ Hormone like ovaprim, ovatide or Wova-FH may be injected @ 0.5ml/kg fish for breeding in both the brooders of grass carp.
	Nurseries	ponds	<p>Water depth should be maintained at 1.0m</p> <p>After liming nursery ponds should be fertilized prior 15 days of spawn stocking.</p> <p>Feeding should be done 2-3 times a day @5-10% body weight/day.</p>



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MANIPUR BULLETIN

26th March, 2013

Imphal-West

IAAS, ICAR-RC Manipur Centre in association with India Meteorological Department, Regional Meteorological Centre, Guwahati and Northern Hemisphere Analysis Centre, New Delhi, Ministry of Earth Science, Govt. of India reports the weather forecasts for the next five days, i.e., from 27th to 31st March, 2013 as given below:

<p><u>Significant past weather for the preceding bi-weekly of Imphal - West (22nd to 25th March, 2013)</u></p> <p>During the past four days the sky was partly cloudy to cloudy but mainly clear during morning hours of 23 and afternoon hours of 24 March. 11.0 mm rainfall was recorded during past four days. Maximum temperature range observed was 28.0 – 28.8 °C, range of minimum temperature observed was 8.1 – 15.2 °C, mean relative humidity observed in morning and afternoon were 79.0 % and 35.25 % respectively. The average wind speed range was 2.3 – 6.8 km/hr.</p>	<p><u>Weather forecast for next five days of Imphal - West (27th to 31st March, 2013)</u></p> <p>There is likely to have thundery showers during next five days. The sky is likely to be mainly clear to partly cloudy during next five days. The maximum temp. is likely to be 28.0 - 31.0 °C. The minimum temp. is likely to be 11.0 – 15.0 °C. The maximum RH is likely to attain a max value of 79 %. Minimum RH is likely to reach a max of 59 %. The average wind speed during next five days may reach upto max. value of 7 km/hr.</p>
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CLOUDS: Kalpana- 1Cloud imagery at 0530 hours IST shows low/medium clouds over some parts of northeastern states.

Weather Forecast for next 3 days (upto 0830 hours IST of 28th March, 2013)

Rain/thundershowers would occur at a few places Manipur.

Weather Warning during next 3 days

Thundersquall would occur at one or two places over Manipur during next 24 hours.

Weather Outlook for subsequent 4 days from 29th March to 2nd April, 2013

Rain/thundershowers would occur at one or two places over northeastern states.

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
Field Crops			
Rice	Pre- Kharif rice		<ul style="list-style-type: none"> * Maintain 5-8cm of water level in fields where seedlings from dry nursery was transplanted. * In wet nursery: <ul style="list-style-type: none"> - Uprooting of seedlings may be done when seedlings are 30-45 days old. - Seedlings should be transplanted within two days of uprooting.
Maize	Vegetative	- Shoot borer	<ul style="list-style-type: none"> - 60 kg of Nitrogen fertilizer per ha is recommended at the time of inter-culture operation at knee-high stage. - Apply 2-3 granules of Furadan 3G at the whorl of each plant.
Rapeseed	Harvesting		- Mature crop may be harvested. After harvesting, it must be sun dried for 2-3 days and threshed. Cleaned seeds must be packed and stored in wooden rack.
Field Pea	Harvesting		- Harvest the mature pods. Pods selected for seed for next season may be sun dried for 2-3 days.
Storage			- Seeds must be stored in RC-seed bins after proper drying. Check for germination of seeds or fungal growth. Clean and dry the seeds.
Horticulture Crops			
Turmeric/ Ginger	Rhizome selection & sowing		<ul style="list-style-type: none"> - Sort out healthy disease free rhizome seed and treat them with Carbendazim and an insecticide before sowing. Let it dry (in case of wet solution treatment) then sow. - Maintain 3-4 inches depth while sowing. Rhizome finger of 25-30 gm with 2-3 buds may be sown. Mother rhizome can also be used as seed by cutting into pieces with 2-3 buds.



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Tuber crops	Land preparation to sowing		<ul style="list-style-type: none"> - In foothills and upland area, colocassia, tapioca and sweet potato. Prepare bed (at slope land: mound/ ridge method and in plain- flat method). - Select 25-30 gm weight sett having 2-3 buds and treat it in Trichoderma solution (20g/1kg FYM slurry) for ½ hr or other pesticide to protect from corm weevil - Spacing: a) 90cm x 90cm for tapioca, b) 45cm x 45cm for sweet potato and c) 45cm x 60cm for colocassia.
Cucurbits	Vegetative		<ul style="list-style-type: none"> - Red pumpkin beetle starts affecting the crop as soon as plant starts bearing leaves. Use Methyl Eugenol as trap @ 10 traps/ sangam.
Tomato	Vegetative to flowering		<p>In tomato foliar fertilization of nitrogen is very much effective. In a hectare crop area, it may be done as follows:</p> <ul style="list-style-type: none"> ▪ For 30 days old crop : 9.71 kg Urea in 1000 lit of water ▪ For 40 days old crop : 14.4 kg Urea in 1500 lit of water ▪ For 50 days old crop : 19.3 kg Urea in 2000 lit of water

Animal Sciences

Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
Pig	Above 3 months of age	Swine Fever	<ul style="list-style-type: none"> - Vaccinate with <i>Swine Fever</i> vaccine as per prescribed dose. - Give vitamins like Feroliv @ 10-20 ml twice daily in feed.
		Deworming	Deworm using Panacur tab @ 1.5mg/10kg body weight.
Cattle / Buffalo/ Mithun	All age groups except three months or below	B.Q. and Haemorrhagic Septicaemia	<ul style="list-style-type: none"> - Vaccination of B.Q. and H.S. polyvalent (dose as per recommendation) is advised. - Provide mineral mixture like Minamil @ 5-10g once daily along with the feed.
Goat	All susceptible age groups	B.Q. and H.S.	- Vaccination of B.Q. and H.S. (dose as per recommendation) is advised.
Poultry	All susceptible age groups	Ranikhet Disease	- By the end of winter and before summer sets in, birds should be vaccinated against <i>Ranikhet disease</i> .
		<i>Coccidiosis</i>	<ul style="list-style-type: none"> - Poultry must be provided <i>Coccidiostat/ Supercox</i> (@ 1g/lit of drinking water) for 5 to 7 days - Provide Calcium preparation like Supercare @ 50ml/100 birds
		Deworming	Deworm with Piperazine liquid @ 50ml/100 birds

Fisheries

Type of Farming	Stage	Field	Agro-metrological advisories
Carp culture	Common carp & grass carp brooders	Pond and water	Water depth should be maintained at 1.5 - 2.0 m
		Feed	Feeds should be provided 2 times a day @ 2-3% body weight per day.
		Fish	Male and female brooders should be stock in separate ponds. Brooders of 2-3 years old having more than 1kg should be selected for seed production.
		Feed	Feed should be provided @ 1-2% body weight per day. Feed can be fed 2 times a day.
	Breeding	pond	<ul style="list-style-type: none"> ▪ Pond should be free from insects, predators, aquatic weeds etc. ▪ Water should be clean, clear having pH, 7.0-7.5; dissolved oxygen 6-8ppm, carbon dioxide –nil. ▪ Hormone like ovaprim, ovatide or Wova-FH may be injected @ 0.5ml/kg fish for breeding in both the brooders of common carp. ▪ Hormone like ovaprim, ovatide or Wova-FH may be injected @ 0.5ml/kg fish for breeding in both the brooders of grass carp.
	Nurseries	ponds	<p>Water depth should be maintained at 1.0m</p> <p>After liming nursery ponds should be fertilized prior 15 days of spawn stocking.</p> <p>Feeding should be done 2-3 times a day @5-10% body weight/day.</p>



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“Integrated Agromet Advisory Services”

MANIPUR BULLETIN

26th March, 2013

Senapati

IAAS, ICAR-RC Manipur Centre in association with India Meteorological Department, Regional Meteorological Centre, Guwahati and Northern Hemisphere Analysis Centre, New Delhi, Ministry of Earth Science, Govt. of India reports the weather forecasts for the next five days, i.e., from 27th to 31st March, 2013 as given below:

<p><u>Significant past weather for the preceding bi-weekly of Imphal - West (22nd to 25th March, 2013)</u></p> <p>During the past four days the sky was partly cloudy to cloudy but mainly clear during morning hours of 23 and afternoon hours of 24 March. 11.0 mm rainfall was recorded during past four days. Maximum temperature range observed was 28.0 – 28.8 °C, range of minimum temperature observed was 8.1 – 15.2 °C, mean relative humidity observed in morning and afternoon were 79.0 % and 35.25 % respectively. The average wind speed range was 2.3 – 6.8 km/hr.</p>	<p><u>Weather forecast for next five days of Senapati (27th to 31st March, 2013)</u></p> <p>There is likely to have thundery showers during next five days. The sky is likely to be mainly clear to partly cloudy during next five days. The maximum temp. is likely to be 26.0 - 29.0 °C. The minimum temp. is likely to be 8.0 – 12.0 °C. The maximum RH is likely to attain a max value of 89 %. Minimum RH is likely to reach a max of 48 %. The average wind speed during next five days may reach upto max. value of 3 km/hr.</p>
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CLOUDS: Kalpana- 1Cloud imagery at 0530 hours IST shows low/medium clouds over some parts of northeastern states.

Weather Forecast for next 3 days (upto 0830 hours IST of 28th March, 2013)

Rain/thundershowers would occur at a few places Manipur.

Weather Warning during next 3 days

Thundersquall would occur at one or two places over Manipur during next 24 hours.

Weather Outlook for subsequent 4 days from 29th March to 2nd April, 2013

Rain/thundershowers would occur at one or two places over northeastern states.

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
Field Crops			
Rice	Pre- Kharif rice		* Maintain 5-8cm of water level in fields where seedlings from dry nursery was transplanted.
			* In wet nursery: - Uprooting of seedlings may be done when seedlings are 30-45 days old. - Seedlings should be transplanted within two days of uprooting.
Maize	Vegetative	- Shoot borer	- 60 kg of Nitrogen fertilizer per ha is recommended at the time of inter-culture operation at knee-high stage. - Apply 2-3 granules of Furadan 3G at the whorl of each plant.
Storage			- Seeds must be stored in RC-seed bins after proper drying. Check for germination of seeds or fungal growth. Clean and dry the seeds.
Horticulture Crops			
Turmeric/ Ginger	Rhizome selection & sowing		- Sort out healthy disease free rhizome seed and treat them with Carbendazim and an insecticide before sowing. Let it dry (in case of wet solution treatment) then sow. - Maintain 3-4 inches depth while sowing. Rhizome finger of 25-30 gm with 2-3 buds may be sown. Mother rhizome can also be used as seed by cutting into pieces with 2-3 buds.
Cucurbits	Vegetative		- Red pumpkin beetle starts affecting the crop as soon as plant starts bearing leaves. Use Methyl Eugenol as trap @ 10 traps/ sangam.



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Tuber crops	Land preparation to sowing		<ul style="list-style-type: none">- In foothills and upland area, colocassia, tapioca and sweet potato. Prepare bed (at slope land: mound/ ridge method and in plain- flat method).- Select 25-30 gm weight sett having 2-3 buds and treat it in Trichoderma solution (20g/1kg FYM slurry) for ½ hr or other pesticide to protect from corm weevil- Spacing: a) 90cm x 90cm for tapioca, b) 45cm x 45cm for sweet potato and c) 45cm x 60cm for colocassia.
Animal Sciences			
Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
Pig	Above 3 months of age	Swine Fever	<ul style="list-style-type: none">- Vaccinate with <i>Swine Fever</i> vaccine as per prescribed dose.- Give vitamins like Feroliv @ 10-20 ml twice daily in feed.
		Deworming	Deworm using Panacur tab @ 1.5mg/10kg body weight.
Cattle / Buffalo/ Mithun	All age groups except three months or below	B.Q. and Haemorrhagic Septicaemia	<ul style="list-style-type: none">- Vaccination of B.Q. and H.S. polyvalent (dose as per recommendation) is advised.- Provide mineral mixture like Minamil @ 5-10g once daily along with the feed.
Goat	All susceptible age groups	B.Q. and H.S.	<ul style="list-style-type: none">- Vaccination of B.Q. and H.S. (dose as per recommendation) is advised.
Poultry	All susceptible age groups	Ranikhet Disease	<ul style="list-style-type: none">- By the end of winter and before summer sets in, birds should be vaccinated against <i>Ranikhet disease</i>.
		<i>Coccidiosis</i>	<ul style="list-style-type: none">- Poultry must be provided <i>Coccidiostat/ Supercox</i> (@ 1g/lit of drinking water) for 5 to 7 days- Provide Calcium preparation like Supercare @ 50ml/100 birds
		Deworming	Deworm with Piperazine liquid @ 50ml/100 birds
Fisheries			
Type of Farming	Stage	Field	Agro-metrological advisories
Carp culture	Common carp & grass carp brooders	Pond and water	Water depth should be maintained at 1.5 - 2.0 m
		Feed	Feeds should be provided 2 times a day @ 2-3% body weight per day.
		Fish	Male and female brooders should be stock in separate ponds. Brooders of 2-3 years old having more than 1kg should be selected for seed production.
		Feed	Feed should be provided @ 1-2% body weight per day. Feed can be fed 2 times a day.
	Breeding	pond	<ul style="list-style-type: none">▪ Pond should be free from insects, predators, aquatic weeds etc.▪ Water should be clean, clear having pH, 7.0-7.5; dissolved oxygen 6-8ppm, carbon dioxide –nil.▪ Hormone like ovaprim, ovatide or Wova-FH may be injected @ <i>0.5ml/kg fish</i> for breeding in both the brooders of common carp.▪ Hormone like ovaprim, ovatide or Wova-FH may be injected @ <i>0.5ml/kg fish</i> for breeding in both the brooders of grass carp.
	Nurseries	ponds	Water depth should be maintained at 1.0m After liming nursery ponds should be fertilized prior 15 days of spawn stocking. Feeding should be done 2-3 times a day @5-10% body weight/day.



**ICAR Research Complex for N.E.H. Region
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“Integrated Agromet Advisory Services”

MANIPUR BULLETIN

26th March, 2013

Tamenglong

IAAS, ICAR-RC Manipur Centre in association with India Meteorological Department, Regional Meteorological Centre, Guwahati and Northern Hemisphere Analysis Centre, New Delhi, Ministry of Earth Science, Govt. of India reports the weather forecasts for the next five days, i.e., from 27th to 31st March, 2013 as given below:

<p><u>Significant past weather for the preceding bi-weekly of Imphal - West (22nd to 25th March, 2013)</u></p> <p>During the past four days the sky was partly cloudy to cloudy but mainly clear during morning hours of 23 and afternoon hours of 24 March. 11.0 mm rainfall was recorded during past four days. Maximum temperature range observed was 28.0 – 28.8 °C, range of minimum temperature observed was 8.1 – 15.2 °C, mean relative humidity observed in morning and afternoon were 79.0 % and 35.25 % respectively. The average wind speed range was 2.3 – 6.8 km/hr.</p>	<p><u>Weather forecast for next five days of Tamenglong (27th to 31st March, 2013)</u></p> <p>There is likely to have thundery showers during next five days. The sky is likely to be mainly clear to partly cloudy during next five days. The maximum temp. is likely to be 29.0 - 32.0 °C. The minimum temp. is likely to be 11.0 – 15.0 °C. The maximum RH is likely to attain a max value of 78 %. Minimum RH is likely to reach a max of 56 %. The average wind speed during next five days may reach upto max. value of 3 km/hr.</p>
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CLOUDS: Kalpana- 1Cloud imagery at 0530 hours IST shows low/medium clouds over some parts of northeastern states.

Weather Forecast for next 3 days (upto 0830 hours IST of 28th March, 2013)

Rain/thundershowers would occur at a few places Manipur.

Weather Warning during next 3 days

Thundersquall would occur at one or two places over Manipur during next 24 hours.

Weather Outlook for subsequent 4 days from 29th March to 2nd April, 2013

Rain/thundershowers would occur at one or two places over northeastern states.

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
Field Crops			
Rice	Pre- Kharif rice		<ul style="list-style-type: none"> * Maintain 5-8cm of water level in fields where seedlings from dry nursery was transplanted. * In wet nursery: <ul style="list-style-type: none"> - Uprooting of seedlings may be done when seedlings are 30-45 days old. - Seedlings should be transplanted within two days of uprooting.
Maize	Vegetative	- Shoot borer	<ul style="list-style-type: none"> - 60 kg of Nitrogen fertilizer per ha is recommended at the time of inter-culture operation at knee-high stage. - Apply 2-3 granules of Furadan 3G at the whorl of each plant.
Rapeseed	Harvesting		- Mature crop may be harvested. After harvesting, it must be sun dried for 2-3 days and threshed. Cleaned seeds must be packed and stored in wooden rack.
Field Pea	Harvesting		- Harvest the mature pods. Pods selected for seed for next season may be sun dried for 2-3 days.
Storage			- Seeds must be stored in RC-seed bins after proper drying. Check for germination of seeds or fungal growth. Clean and dry the seeds.
Horticulture Crops			
Turmeric/ Ginger	Rhizome selection & sowing		<ul style="list-style-type: none"> - Sort out healthy disease free rhizome seed and treat them with Carbendazim and an insecticide before sowing. Let it dry (in case of wet solution treatment) then sow. - Maintain 3-4 inches depth while sowing. Rhizome finger of 25-30 gm with 2-3 buds may be sown. Mother rhizome can also be used as seed by cutting into pieces with 2-3 buds.



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Manipur Centre, Lamphelpat, Imphal - 795 004



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Tuber crops	Land preparation to sowing		<ul style="list-style-type: none"> - In foothills and upland area, colocassia, tapioca and sweet potato. Prepare bed (at slope land: mound/ ridge method and in plain- flat method). - Select 25-30 gm weight sett having 2-3 buds and treat it in Trichoderma solution (20g/1kg FYM slurry) for ½ hr or other pesticide to protect from corm weevil - Spacing: a) 90cm x 90cm for tapioca, b) 45cm x 45cm for sweet potato and c) 45cm x 60cm for colocassia.
Cucurbits	Vegetative		<ul style="list-style-type: none"> - Red pumpkin beetle starts affecting the crop as soon as plant starts bearing leaves. Use Methyl Eugenol as trap @ 10 traps/ sangam.
Tomato	Vegetative to flowering		<p>In tomato foliar fertilization of nitrogen is very much effective. In a hectare crop area, it may be done as follows:</p> <ul style="list-style-type: none"> ▪ For 30 days old crop : 9.71 kg Urea in 1000 lit of water ▪ For 40 days old crop : 14.4 kg Urea in 1500 lit of water ▪ For 50 days old crop : 19.3 kg Urea in 2000 lit of water

Animal Sciences

Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
Pig	Above 3 months of age	Swine Fever	<ul style="list-style-type: none"> - Vaccinate with <i>Swine Fever</i> vaccine as per prescribed dose. - Give vitamins like Feroliv @ 10-20 ml twice daily in feed.
		Deworming	Deworm using Panacur tab @ 1.5mg/10kg body weight.
Cattle / Buffalo/ Mithun	All age groups except three months or below	B.Q. and Haemorrhagic Septicaemia	<ul style="list-style-type: none"> - Vaccination of B.Q. and H.S. polyvalent (dose as per recommendation) is advised. - Provide mineral mixture like Minamil @ 5-10g once daily along with the feed.
Goat	All susceptible age groups	B.Q. and H.S.	- Vaccination of B.Q. and H.S. (dose as per recommendation) is advised.
Poultry	All susceptible age groups	Ranikhet Disease	- By the end of winter and before summer sets in, birds should be vaccinated against <i>Ranikhet disease</i> .
		<i>Coccidiosis</i>	<ul style="list-style-type: none"> - Poultry must be provided <i>Coccidiostat/ Supercox</i> (@ 1g/lit of drinking water) for 5 to 7 days - Provide Calcium preparation like Supercare @ 50ml/100 birds
		Deworming	Deworm with Piperazine liquid @ 50ml/100 birds

Fisheries

Type of Farming	Stage	Field	Agro-metrological advisories
Carp culture	Common carp & grass carp brooders	Pond and water	Water depth should be maintained at 1.5 - 2.0 m
		Feed	Feeds should be provided 2 times a day @ 2-3% body weight per day.
		Fish	Male and female brooders should be stock in separate ponds. Brooders of 2-3 years old having more than 1kg should be selected for seed production.
		Feed	Feed should be provided @ 1-2% body weight per day. Feed can be fed 2 times a day.
	Breeding	pond	<ul style="list-style-type: none"> ▪ Pond should be free from insects, predators, aquatic weeds etc. ▪ Water should be clean, clear having pH, 7.0-7.5; dissolved oxygen 6-8ppm, carbon dioxide –nil. ▪ Hormone like ovaprim, ovatide or Wova-FH may be injected @ 0.5ml/kg fish for breeding in both the brooders of common carp. ▪ Hormone like ovaprim, ovatide or Wova-FH may be injected @ 0.5ml/kg fish for breeding in both the brooders of grass carp.
	Nurseries	ponds	<p>Water depth should be maintained at 1.0m</p> <p>After liming nursery ponds should be fertilized prior 15 days of spawn stocking.</p> <p>Feeding should be done 2-3 times a day @5-10% body weight/day.</p>



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**ICAR Research Complex for N.E.H. Region
Manipur Centre, Lamphelpat, Imphal - 795 004**



“Integrated Agromet Advisory Services”

MANIPUR BULLETIN

26th March, 2013

Thoubal

IAAS, ICAR-RC Manipur Centre in association with India Meteorological Department, Regional Meteorological Centre, Guwahati and Northern Hemisphere Analysis Centre, New Delhi, Ministry of Earth Science, Govt. of India reports the weather forecasts for the next five days, i.e., from 27th to 31st March, 2013 as given below:

<p><u>Significant past weather for the preceding bi-weekly of Imphal - West (22nd to 25th March, 2013)</u></p> <p>During the past four days the sky was partly cloudy to cloudy but mainly clear during morning hours of 23 and afternoon hours of 24 March. 11.0 mm rainfall was recorded during past four days. Maximum temperature range observed was 28.0 – 28.8 °C, range of minimum temperature observed was 8.1 – 15.2 °C, mean relative humidity observed in morning and afternoon were 79.0 % and 35.25 % respectively. The average wind speed range was 2.3 – 6.8 km/hr.</p>	<p><u>Weather forecast for next five days of Thoubal (27th to 31st March, 2013)</u></p> <p>There is likely to have thundery showers during next five days. The sky is likely to be mainly clear to partly cloudy during next five days. The maximum temp. is likely to be 27.0 - 31.0 °C. The minimum temp. is likely to be 9.0 – 14.0 °C. The maximum RH is likely to attain a max value of 82 %. Minimum RH is likely to reach a max of 48 %. The average wind speed during next five days may reach upto max. value of 4 km/hr.</p>
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CLOUDS: Kalpana- 1Cloud imagery at 0530 hours IST shows low/medium clouds over some parts of northeastern states.

Weather Forecast for next 3 days (upto 0830 hours IST of 28th March, 2013)

Rain/thundershowers would occur at a few places Manipur.

Weather Warning during next 3 days

Thundersquall would occur at one or two places over Manipur during next 24 hours.

Weather Outlook for subsequent 4 days from 29th March to 2nd April, 2013

Rain/thundershowers would occur at one or two places over northeastern states.

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
Field Crops			
Rice	Pre- Kharif rice		* Maintain 5-8cm of water level in fields where seedlings from dry nursery was transplanted.
			* In wet nursery: - Uprooting of seedlings may be done when seedlings are 30-45 days old. - Seedlings should be transplanted within two days of uprooting.
Maize	Vegetative	- Shoot borer	- 60 kg of Nitrogen fertilizer per ha is recommended at the time of inter-culture operation at knee-high stage. - Apply 2-3 granules of Furadan 3G at the whorl of each plant.
Rapeseed	Harvesting		- Mature crop may be harvested. After harvesting, it must be sun dried for 2-3 days and threshed. Cleaned seeds must be packed and stored in wooden rack.
Field Pea	Harvesting		- Harvest the mature pods. Pods selected for seed for next season may be sun dried for 2-3 days.
Storage			- Seeds must be stored in RC-seed bins after proper drying. Check for germination of seeds or fungal growth. Clean and dry the seeds.
Horticulture Crops			
Turmeric/ Ginger	Rhizome selection & sowing		- Sort out healthy disease free rhizome seed and treat them with Carbendazim and an insecticide before sowing. Let it dry (in case of wet solution treatment) then sow. - Maintain 3-4 inches depth while sowing. Rhizome finger of 25-30 gm with 2-3 buds may be sown. Mother rhizome can also be used as seed by cutting into pieces with 2-3 buds.



ICAR Research Complex for N.E.H. Region
Manipur Centre, Lamphelpat, Imphal - 795 004



“Integrated Agromet Advisory Services”

Tuber crops	Land preparation to sowing		<ul style="list-style-type: none"> - In foothills and upland area, colocassia, tapioca and sweet potato. Prepare bed (at slope land: mound/ ridge method and in plain- flat method). - Select 25-30 gm weight sett having 2-3 buds and treat it in Trichoderma solution (20g/1kg FYM slurry) for ½ hr or other pesticide to protect from corm weevil - Spacing: a) 90cm x 90cm for tapioca, b) 45cm x 45cm for sweet potato and c) 45cm x 60cm for colocassia.
Cucurbits	Vegetative		<ul style="list-style-type: none"> - Red pumpkin beetle starts affecting the crop as soon as plant starts bearing leaves. Use Methyl Eugenol as trap @ 10 traps/ sangam.
Tomato	Vegetative to flowering		<p>In tomato foliar fertilization of nitrogen is very much effective. In a hectare crop area, it may be done as follows:</p> <ul style="list-style-type: none"> ▪ For 30 days old crop : 9.71 kg Urea in 1000 lit of water ▪ For 40 days old crop : 14.4 kg Urea in 1500 lit of water ▪ For 50 days old crop : 19.3 kg Urea in 2000 lit of water

Animal Sciences

Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
Pig	Above 3 months of age	Swine Fever	<ul style="list-style-type: none"> - Vaccinate with <i>Swine Fever</i> vaccine as per prescribed dose. - Give vitamins like Feroliv @ 10-20 ml twice daily in feed.
		Deworming	Deworm using Panacur tab @ 1.5mg/10kg body weight.
Cattle / Buffalo/ Mithun	All age groups except three months or below	B.Q. and Haemorrhagic Septicaemia	<ul style="list-style-type: none"> - Vaccination of B.Q. and H.S. polyvalent (dose as per recommendation) is advised. - Provide mineral mixture like Minamil @ 5-10g once daily along with the feed.
Goat	All susceptible age groups	B.Q. and H.S.	- Vaccination of B.Q. and H.S. (dose as per recommendation) is advised.
Poultry	All susceptible age groups	Ranikhet Disease	- By the end of winter and before summer sets in, birds should be vaccinated against <i>Ranikhet disease</i> .
		<i>Coccidiosis</i>	<ul style="list-style-type: none"> - Poultry must be provided <i>Coccidiostat/ Supercox</i> (@ 1g/lit of drinking water) for 5 to 7 days - Provide Calcium preparation like Supercare @ 50ml/100 birds
		Deworming	Deworm with Piperazine liquid @ 50ml/100 birds

Fisheries

Type of Farming	Stage	Field	Agro-metrological advisories
Carp culture	Common carp & grass carp brooders	Pond and water	Water depth should be maintained at 1.5 - 2.0 m
		Feed	Feeds should be provided 2 times a day @ 2-3% body weight per day.
		Fish	Male and female brooders should be stock in separate ponds. Brooders of 2-3 years old having more than 1kg should be selected for seed production.
		Feed	Feed should be provided @ 1-2% body weight per day. Feed can be fed 2 times a day.
	Breeding	pond	<ul style="list-style-type: none"> ▪ Pond should be free from insects, predators, aquatic weeds etc. ▪ Water should be clean, clear having pH, 7.0-7.5; dissolved oxygen 6-8ppm, carbon dioxide –nil. ▪ Hormone like ovaprim, ovatide or Wova-FH may be injected @ 0.5ml/kg fish for breeding in both the brooders of common carp. ▪ Hormone like ovaprim, ovatide or Wova-FH may be injected @ 0.5ml/kg fish for breeding in both the brooders of grass carp.
	Nurseries	ponds	<p>Water depth should be maintained at 1.0m</p> <p>After liming nursery ponds should be fertilized prior 15 days of spawn stocking.</p> <p>Feeding should be done 2-3 times a day @5-10% body weight/day.</p>



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“Integrated Agromet Advisory Services”

AMFU- Imphal Unit



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“Integrated Agromet Advisory Services”

MANIPUR BULLETIN

26th March, 2013

Ukhrul

IAAS, ICAR-RC Manipur Centre in association with India Meteorological Department, Regional Meteorological Centre, Guwahati and Northern Hemisphere Analysis Centre, New Delhi, Ministry of Earth Science, Govt. of India reports the weather forecasts for the next five days, i.e., from 27th to 31st March, 2013 as given below:

<p><u>Significant past weather for the preceding bi-weekly of Imphal - West (22nd to 25th March, 2013)</u></p> <p>During the past four days the sky was partly cloudy to cloudy but mainly clear during morning hours of 23 and afternoon hours of 24 March. 11.0 mm rainfall was recorded during past four days. Maximum temperature range observed was 28.0 – 28.8 °C, range of minimum temperature observed was 8.1 – 15.2 °C, mean relative humidity observed in morning and afternoon were 79.0 % and 35.25 % respectively. The average wind speed range was 2.3 – 6.8 km/hr.</p>	<p><u>Weather forecast for next five days of Ukhrul (27th to 31st March, 2013)</u></p> <p>There is likely to have thundery showers during next five days. The sky is likely to be mainly clear to partly cloudy during next five days. The maximum temp. is likely to be 26.0 - 29.0 °C. The minimum temp. is likely to be 8.0 – 11.0 °C. The maximum RH is likely to attain a max value of 78 %. Minimum RH is likely to reach a max of 35 %. The average wind speed during next five days may reach upto max. value of 5 km/hr.</p>
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CLOUDS: Kalpana- 1Cloud imagery at 0530 hours IST shows low/medium clouds over some parts of northeastern states.

Weather Forecast for next 3 days (upto 0830 hours IST of 28th March, 2013)

Rain/thundershowers would occur at a few places Manipur.

Weather Warning during next 3 days

Thundersquall would occur at one or two places over Manipur during next 24 hours.

Weather Outlook for subsequent 4 days from 29th March to 2nd April, 2013

Rain/thundershowers would occur at one or two places over northeastern states.

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
Field Crops			
Rice	Pre- Kharif rice		* Maintain 5-8cm of water level in fields where seedlings from dry nursery was transplanted.
			* In wet nursery: - Uprooting of seedlings may be done when seedlings are 30-45 days old. - Seedlings should be transplanted within two days of uprooting.
Maize	Vegetative	- Shoot borer	- 60 kg of Nitrogen fertilizer per ha is recommended at the time of inter-culture operation at knee-high stage. - Apply 2-3 granules of Furadan 3G at the whorl of each plant.
Storage			- Seeds must be stored in RC-seed bins after proper drying. Check for germination of seeds or fungal growth. Clean and dry the seeds.
Horticulture Crops			
Turmeric/ Ginger	Rhizome selection & sowing		- Sort out healthy disease free rhizome seed and treat them with Carbendazim and an insecticide before sowing. Let it dry (in case of wet solution treatment) then sow. - Maintain 3-4 inches depth while sowing. Rhizome finger of 25-30 gm with 2-3 buds may be sown. Mother rhizome can also be used as seed by cutting into pieces with 2-3 buds.
Cucurbits	Vegetative		- Red pumpkin beetle starts affecting the crop as soon as plant starts bearing leaves. Use Methyl Eugenol as trap @ 10 traps/ sangam.



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	Nurseries	ponds	Water depth should be maintained at 1.0m After liming nursery ponds should be fertilized prior 15 days of spawn stocking. Feeding should be done 2-3 times a day @5-10% body weight/day.