



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



“Integrated Agromet Advisory Services”

MANIPUR BULLETIN

26th April, 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 April to 1st May, 2013 as given below:

<p><u>Significant past weather for the preceding bi-weekly of Imphal - West (23rd to 25th April, 2013)</u></p> <p>During the past three days the sky was partly cloudy to mainly clear. No rainfall was recorded during past three days. Maximum temperature range observed was 30.0 – 30.7 °C, range of minimum temperature observed was 14.1 – 15.0 °C, mean relative humidity observed in morning and afternoon were 81.67 % and 41.0 % respectively. The average wind speed range was 2.8 – 3.0 km/hr.</p>	<p><u>Weather forecast for next five days of Bishnupur (27th April to 1st May, 2013)</u></p> <p>There is likely to have no rain on 27th then light to moderate rainfall from 28th onward. The sky is likely to be mainly clear on 27th but partly cloudy to cloudy from 28th onward. The maximum temp. is likely to be 28.0 - 30.0 °C. The minimum temp. is likely to be 13.0 – 17.0 °C. The maximum RH is likely to attain a max value of 90 %. Minimum RH is likely to reach a max of 49 %. The average wind speed during next five days may reach upto max. value of 4 km/hr.</p>
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Weather Forecast for next 3 days (upto 0830 hours IST of 29th April, 2013)

Rain/thundershowers would occur at one or two places over northeastern states and is likely to increase from tomorrow onwards

Weather Outlook for subsequent 4 days from 29th April to 3rd May, 2013

Rain/thundershowers would occur at many places over northeastern states

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
Field Crops			
Pre- Kharif Rice	Vegetative		<ul style="list-style-type: none"> - After 7 days of transplanting maintain 5-8 cm of water depth in the crop field. - After 30-35 days of transplanting, completely remove water and top dress with 33 kg Urea and 16 kg MOP per hectare. After 48 hrs irrigate the field and maintain water depth of 5-8 cm
Maize	Sowing		<ul style="list-style-type: none"> - Sowing may be done by maintaining a spacing of 60cm x 30cm. - Top dressing may be done when the plants is knee high.
	Vegetative to flowering	- Shoot borer	<ul style="list-style-type: none"> - Apply 2-3 granules of Furadan 3G at the whorl of infected plant. - Weeding may be done.
Groundnut & soybean	Land preparation to sowing		<ul style="list-style-type: none"> - 10-12 t/ha or 2.5-3 t/sangam of FYM or compost before 3 - 4 weeks of sowing. It is recommended to apply 44 kg of urea, 372kg of SSP and 67 kg of MOP per hectare as a basal application during final ploughing or incorporated at the time of sowing. Also, avoid land where water stagnation problem exists. - Sowing may be done in prepared field.
Storage			<ul style="list-style-type: none"> - Clean and store the seeds in RC-seed bins after proper drying. Check for germination of seeds or fungal growth.
Horticulture Crops			
Ginger & turmeric	Planting		<ul style="list-style-type: none"> Spacings for planting of ginger (25cm plant to plant and 25-30cm row to row) and turmeric (25cm plant to plant and 40-45cm row to row).
Bhindi	Sowing to vegetative		<ul style="list-style-type: none"> - Sowing of Bhindi bean may be done. - Weeding may be done for crops in vegetative stage.
Cucurbits	Flowering to fruiting	Red Pumpkin Beetle	<ul style="list-style-type: none"> - Use Methyl Euginol@ 4-5 drops/ 150-200 ml of water as trap against Red Pumpkin Beetle.
Onion	Harvesting and post harvesting		<ul style="list-style-type: none"> - Complete harvesting of mature crop by 27th as there is likely of light to moderate rain from 28th onwards. After harvesting, let it dry for 4-5 days in airy shed. Cut the leaves & roots and sorting & grading may be done.



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Fruits	Small seedlings/ cutting of citrus, papaya & passion fruit		- Minimum life saving irrigation should be given in all nurseries. - Mulching with dried twigs/ vegetables leaves will help to retain moisture till rain come.
Colocassia	Corm treatment		- Corm treatment should be done with Carbendazim @ 2 gm/lit of water for 20-30 minutes and then dry in the shed before sowing. - If the area is insect prone, 8-10 granules of Furadan/pit may be applied at the time of sowing. - Never select damp/ water logged or shady area.
Khasi Mandarin	Grown-up trees		In Khasi Mandarin apply 500g Urea, 1kg SSP & 400g MOP per plant along with 30 kg cowdung manure compost.

Animal Sciences

* Take up measures for mosquito population control at farm premises.

Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
Pig	Above 3 months of age	Swine Fever	- Vaccinate with <i>Swine Fever</i> vaccine as per prescribed dose but de-worm using Panacur tab @ 1.5mg/10kg body weight before vaccination. Don't use Korean strain vaccine as the vaccine gives no protection - Vaccinate all the susceptible animals against the FMD.
Cattle / Buffalo/ Mithun	All age groups except three months or below	- B.Q. and Haemorrhagic Septicaemia - FMD	- Vaccination of <i>B.Q. and H.S.</i> polyvalent (dose as per recommendation) is advised but deworm with appropriate agent before vaccination. - Vaccinate all the susceptible animals against the FMD.
Poultry	All susceptible age groups	Ranikhet Disease	- Birds should be vaccinated against <i>Ranikhet disease</i> but deworm before vaccination.
		<i>Coccidiosis</i>	- Poultry must be provided <i>Coccidiostat/ Supercox</i> (@ 1g/lit of drinking water) + plus 150gm of Glucose and vit K for 5 to 7 days. - Provide clean & safe drinking water by adding Sukrena (scntizer) to avoid <i>Colebacilliosis</i> .
		Management	- Wire net portion of the wall should be covered by hanging polythene sheet to protect from rain. - Litter management: Apply lime powder @ 2kg per 100 sq. ft. area in litter material.

Fisheries

* In case of moderate rainfall, water should not be allowed to drain directly into the ponds as it may contaminate with unwanted elements.

Type of Farming	Stage	Management	Agro-metrological advisories
Carp culture	Brooders	Pond and water	Ensure good quality/ clean water free from unwanted plants and animals with a minimum depth of 1.5 m.
		Feed	Fish feed pellet or rice bran & oil cakes (in ratio 1:1) should be provided @ 3-5% body weight per day in 2-3 splits.
		Health	Spray CIFAX on the surface of the pond water. Male and female brooders must be kept in separate tanks.
	Breeding	pond	<ul style="list-style-type: none"> Pond should be free from silt, weeds, insects and other unwanted fishes. p^H of water must be maintained at 7.0-8.0 Fish hormones like ovaprim, ovatide or Wova-FH can be injected in both the brooders @ 0.5 - 0.7 ml/kg of fish (grass carp).
	Hatcheries	water	<ul style="list-style-type: none"> Water should be clear and clean with pH 7.0-7.5 and dissolved oxygen level should be 6-8 ppm. Hatching can be done in traditional hapas having outer & inner hapas or circular hatcheries. A mild current with fine shower is needed for circular hatcheries. Feed should not be given for 3 days.
	Nurseries	ponds	- Pond should be free from silt, weeds, insects and other unwanted fishes. 20-30 lakhs spawns can be stocked in one hectare water. Water depth should be more than 1.0 m. Feeding should be given @ 5-10% body weight/day.



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MANIPUR BULLETIN

26th April, 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 April to 1st May, 2013 as given below:

<p><u>Significant past weather for the preceding bi-weekly of Imphal - West (23rd to 25th April, 2013)</u></p> <p>During the past three days the sky was partly cloudy to mainly clear. No rainfall was recorded during past three days. Maximum temperature range observed was 30.0 – 30.7 °C, range of minimum temperature observed was 14.1 – 15.0 °C, mean relative humidity observed in morning and afternoon were 81.67 % and 41.0 % respectively. The average wind speed range was 2.8 – 3.0 km/hr.</p>	<p><u>Weather forecast for next five days of Chandel (27th April to 1st May, 2013)</u></p> <p>There is likely to have no rain on 27th then light to moderate rainfall from 28th onward. The sky is likely to be partly cloudy to cloudy. The maximum temp. is likely to be 29.0 - 32.0 °C. The minimum temp. is likely to be 15.0 – 20.0 °C. The maximum RH is likely to attain a max value of 82 %. Minimum RH is likely to reach a max of 38 %. The average wind speed during next five days may reach upto max. value of 5 km/hr.</p>
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Weather Forecast for next 3 days (upto 0830 hours IST of 29th April, 2013)

Rain/thundershowers would occur at one or two places over northeastern states and is likely to increase from tomorrow onwards

Weather Outlook for subsequent 4 days from 29th April to 3rd May, 2013

Rain/thundershowers would occur at many places over northeastern states

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
Field Crops			
Pre- Kharif Rice	Vegetative		<ul style="list-style-type: none"> - After 7 days of transplanting maintain 5-8 cm of water depth in the crop field. - After 30-35 days of transplanting, completely remove water and top dress with 33 kg Urea and 16 kg MOP per hectare. After 48 hrs irrigate the field and maintain water depth of 5-8 cm
Maize	Sowing		<ul style="list-style-type: none"> - Sowing may be done by maintaining a spacing of 60cm x 30cm. - Top dressing may be done when the plants is knee high.
	Vegetative to flowering	- Shoot borer	<ul style="list-style-type: none"> - Apply 2-3 granules of Furadan 3G at the whorl of infected plant. - Weeding may be done.
Groundnut & soybean	Land preparation to sowing		<ul style="list-style-type: none"> - 10-12 t/ha or 2.5-3 t/sangam of FYM or compost before 3 - 4 weeks of sowing. It is recommended to apply 44 kg of urea, 372kg of SSP and 67 kg of MOP per hectare as a basal application during final ploughing or incorporated at the time of sowing. Also, avoid land where water stagnation problem exists. - Sowing may be done in prepared field.
Storage			<ul style="list-style-type: none"> - Clean and store the seeds in RC-seed bins after proper drying. Check for germination of seeds or fungal growth.
Horticulture Crops			
Ginger & turmeric	Planting		<ul style="list-style-type: none"> Spacings for planting of ginger (25cm plant to plant and 25-30cm row to row) and turmeric (25cm plant to plant and 40-45cm row to row).
Bhindi	Sowing to vegetative		<ul style="list-style-type: none"> - Sowing of Bhindi bean may be done. - Weeding may be done for crops in vegetative stage.
Cucurbits	Flowering to fruiting	Red Pumpkin Beetle	<ul style="list-style-type: none"> - Use Methyl Euginol@ 4-5 drops/ 150-200 ml of water as trap against Red Pumpkin Beetle.
Onion	Harvesting and post harvesting		<ul style="list-style-type: none"> - Complete harvesting of mature crop by 27th as there is likely of light to moderate rain from 28th onwards. After harvesting, let it dry for 4-5 days in airy shed. Cut the leaves & roots and sorting & grading may be done.



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Fruits	Small seedlings/ cutting of citrus, papaya & passion fruit		- Minimum life saving irrigation should be given in all nurseries. - Mulching with dried twigs/ vegetables leaves will help to retain moisture till rain come.
Colocassia	Corm treatment		- Corm treatment should be done with Carbendazim @ 2 gm/lit of water for 20-30 minutes and then dry in the shed before sowing. - If the area is insect prone, 8-10 granules of Furadan/pit may be applied at the time of sowing. - Never select damp/ water logged or shady area.
Khasi Mandarin	Grown-up trees		In Khasi Mandarin apply 500g Urea, 1kg SSP & 400g MOP per plant along with 30 kg cowdung manure compost.

Animal Sciences

* Take up measures for mosquito population control at farm premises.

Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
Pig	Above 3 months of age	Swine Fever	- Vaccinate with <i>Swine Fever</i> vaccine as per prescribed dose but de-worm using Panacur tab @ 1.5mg/10kg body weight before vaccination. Don't use Korean strain vaccine as the vaccine gives no protection - Vaccinate all the susceptible animals against the FMD.
Cattle / Buffalo/ Mithun	All age groups except three months or below	- B.Q. and Haemorrhagic Septicaemia - FMD	- Vaccination of <i>B.Q. and H.S.</i> polyvalent (dose as per recommendation) is advised but deworm with appropriate agent before vaccination. - Vaccinate all the susceptible animals against the FMD.
Poultry	All susceptible age groups	Ranikhet Disease	- Birds should be vaccinated against <i>Ranikhet disease</i> but deworm before vaccination.
		<i>Coccidiosis</i>	- Poultry must be provided <i>Coccidiostat/ Supercox</i> (@ 1g/lit of drinking water) + plus 150gm of Glucose and vit K for 5 to 7 days. - Provide clean & safe drinking water by adding Sukrena (scntizer) to avoid <i>Colebacilliosis</i> .
		Management	- Wire net portion of the wall should be covered by hanging polythene sheet to protect from rain. - Litter management: Apply lime powder @ 2kg per 100 sq. ft. area in litter material.

Fisheries

* In case of moderate rainfall, water should not be allowed to drain directly into the ponds as it may contaminate with unwanted elements.

Type of Farming	Stage	Management	Agro-metrological advisories
Carp culture	Brooders	Pond and water	Ensure good quality/ clean water free from unwanted plants and animals with a minimum depth of 1.5 m.
		Feed	Fish feed pellet or rice bran & oil cakes (in ratio 1:1) should be provided @ 3-5% body weight per day in 2-3 splits.
		Health	Spray CIFAX on the surface of the pond water. Male and female brooders must be kept in separate tanks.
	Breeding	pond	<ul style="list-style-type: none"> Pond should be free from silt, weeds, insects and other unwanted fishes. p^H of water must be maintained at 7.0-8.0 Fish hormones like ovaprim, ovatide or Wova-FH can be injected in both the brooders @ 0.5 - 0.7 ml/kg of fish (grass carp).
	Hatcheries	water	<ul style="list-style-type: none"> Water should be clear and clean with pH 7.0-7.5 and dissolved oxygen level should be 6-8 ppm. Hatching can be done in traditional hapas having outer & inner hapas or circular hatcheries. A mild current with fine shower is needed for circular hatcheries. Feed should not be given for 3 days.
	Nurseries	ponds	- Pond should be free from silt, weeds, insects and other unwanted fishes. 20-30 lakhs spawns can be stocked in one hectare water. Water depth should be more than 1.0 m. Feeding should be given @ 5-10% body weight/day.



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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 April to 1st May, 2013 as given below:

<p><u>Significant past weather for the preceding bi-weekly of Imphal - West (23rd to 25th April, 2013)</u></p> <p>During the past three days the sky was partly cloudy to mainly clear. No rainfall was recorded during past three days. Maximum temperature range observed was 30.0 – 30.7 °C, range of minimum temperature observed was 14.1 – 15.0 °C, mean relative humidity observed in morning and afternoon were 81.67 % and 41.0 % respectively. The average wind speed range was 2.8 – 3.0 km/hr.</p>	<p><u>Weather forecast for next five days of Churachandpur (27th April to 1st May, 2013)</u></p> <p>There is likely to have no rain on 27th then light to moderate rainfall from 28th onward. The sky is likely to be partly cloudy to cloudy. The maximum temp. is likely to be 27.0 - 31.0 °C. The minimum temp. is likely to be 13.0 – 18.0 °C. The maximum RH is likely to attain a max value of 91 %. Minimum RH is likely to reach a max of 39 %. 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 29th April, 2013)

Rain/thundershowers would occur at one or two places over northeastern states and is likely to increase from tomorrow onwards

Weather Outlook for subsequent 4 days from 29th April to 3rd May, 2013

Rain/thundershowers would occur at many places over northeastern states

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
Field Crops			
Pre- Kharif Rice	Vegetative		<ul style="list-style-type: none"> - After 7 days of transplanting maintain 5-8 cm of water depth in the crop field. - After 30-35 days of transplanting, completely remove water and top dress with 33 kg Urea and 16 kg MOP per hectare. After 48 hrs irrigate the field and maintain water depth of 5-8 cm
Maize	Sowing		<ul style="list-style-type: none"> - Sowing may be done by maintaining a spacing of 60cm x 30cm. - Top dressing may be done when the plants is knee high.
	Vegetative to flowering	- Shoot borer	<ul style="list-style-type: none"> - Apply 2-3 granules of Furadan 3G at the whorl of infected plant. - Weeding may be done.
Groundnut & soybean	Land preparation to sowing		<ul style="list-style-type: none"> - 10-12 t/ha or 2.5-3 t/sangam of FYM or compost before 3 - 4 weeks of sowing. It is recommended to apply 44 kg of urea, 372kg of SSP and 67 kg of MOP per hectare as a basal application during final ploughing or incorporated at the time of sowing. Also, avoid land where water stagnation problem exists. - Sowing may be done in prepared field.
Storage			<ul style="list-style-type: none"> - Clean and store the seeds in RC-seed bins after proper drying. Check for germination of seeds or fungal growth.
Horticulture Crops			
Ginger & turmeric	Planting		<ul style="list-style-type: none"> Spacings for planting of ginger (25cm plant to plant and 25-30cm row to row) and turmeric (25cm plant to plant and 40-45cm row to row).
Bhindi	Sowing to vegetative		<ul style="list-style-type: none"> - Sowing of Bhindi bean may be done. - Weeding may be done for crops in vegetative stage.
Cucurbits	Flowering to fruiting	Red Pumpkin Beetle	<ul style="list-style-type: none"> - Use Methyl Euginol@ 4-5 drops/ 150-200 ml of water as trap against Red Pumpkin Beetle.
Onion	Harvesting and post harvesting		<ul style="list-style-type: none"> - Complete harvesting of mature crop by 27th as there is likely of light to moderate rain from 28th onwards. After harvesting, let it dry for 4-5 days in airy shed. Cut the leaves & roots and sorting & grading may be done.



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Fruits	Small seedlings/ cutting of citrus, papaya & passion fruit		- Minimum life saving irrigation should be given in all nurseries. - Mulching with dried twigs/ vegetables leaves will help to retain moisture till rain come.
Colocassia	Corm treatment		- Corm treatment should be done with Carbendazim @ 2 gm/lit of water for 20-30 minutes and then dry in the shed before sowing. - If the area is insect prone, 8-10 granules of Furadan/pit may be applied at the time of sowing. - Never select damp/ water logged or shady area.
Khasi Mandarin	Grown-up trees		In Khasi Mandarin apply 500g Urea, 1kg SSP & 400g MOP per plant along with 30 kg cowdung manure compost.

Animal Sciences

* Take up measures for mosquito population control at farm premises.

Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
Pig	Above 3 months of age	Swine Fever	- Vaccinate with <i>Swine Fever</i> vaccine as per prescribed dose but de-worm using Panacur tab @ 1.5mg/10kg body weight before vaccination. Don't use Korean strain vaccine as the vaccine gives no protection - Vaccinate all the susceptible animals against the FMD.
Cattle / Buffalo/ Mithun	All age groups except three months or below	- B.Q. and Haemorrhagic Septicaemia - FMD	- Vaccination of <i>B.Q. and H.S.</i> polyvalent (dose as per recommendation) is advised but deworm with appropriate agent before vaccination. - Vaccinate all the susceptible animals against the FMD.
Poultry	All susceptible age groups	Ranikhet Disease	- Birds should be vaccinated against <i>Ranikhet disease</i> but deworm before vaccination.
		<i>Coccidiosis</i>	- Poultry must be provided <i>Coccidiostat/ Supercox</i> (@ 1g/lit of drinking water) + plus 150gm of Glucose and vit K for 5 to 7 days. - Provide clean & safe drinking water by adding Sukrena (scntizer) to avoid <i>Colebacilliosis</i> .
		Management	- Wire net portion of the wall should be covered by hanging polythene sheet to protect from rain. - Litter management: Apply lime powder @ 2kg per 100 sq. ft. area in litter material.

Fisheries

* In case of moderate rainfall, water should not be allowed to drain directly into the ponds as it may contaminate with unwanted elements.

Type of Farming	Stage	Management	Agro-metrological advisories
Carp culture	Brooders	Pond and water	Ensure good quality/ clean water free from unwanted plants and animals with a minimum depth of 1.5 m.
		Feed	Fish feed pellet or rice bran & oil cakes (in ratio 1:1) should be provided @ 3-5% body weight per day in 2-3 splits.
		Health	Spray CIFAX on the surface of the pond water. Male and female brooders must be kept in separate tanks.
	Breeding	pond	<ul style="list-style-type: none"> Pond should be free from silt, weeds, insects and other unwanted fishes. p^H of water must be maintained at 7.0-8.0 Fish hormones like ovaprim, ovatide or Wova-FH can be injected in both the brooders @ 0.5 - 0.7 ml/kg of fish (grass carp).
	Hatcheries	water	<ul style="list-style-type: none"> Water should be clear and clean with pH 7.0-7.5 and dissolved oxygen level should be 6-8 ppm. Hatching can be done in traditional hapas having outer & inner hapas or circular hatcheries. A mild current with fine shower is needed for circular hatcheries. Feed should not be given for 3 days.
	Nurseries	ponds	- Pond should be free from silt, weeds, insects and other unwanted fishes. 20-30 lakhs spawns can be stocked in one hectare water. Water depth should be more than 1.0 m. Feeding should be given @ 5-10% body weight/day.



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MANIPUR BULLETIN

26th April, 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 April to 1st May, 2013 as given below:

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Weather Forecast for next 3 days (upto 0830 hours IST of 29th April, 2013)

Rain/thundershowers would occur at one or two places over northeastern states and is likely to increase from tomorrow onwards

Weather Outlook for subsequent 4 days from 29th April to 3rd May, 2013

Rain/thundershowers would occur at many places over northeastern states

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
Field Crops			
Pre- Kharif Rice	Vegetative		<ul style="list-style-type: none"> - After 7 days of transplanting maintain 5-8 cm of water depth in the crop field. - After 30-35 days of transplanting, completely remove water and top dress with 33 kg Urea and 16 kg MOP per hectare. After 48 hrs irrigate the field and maintain water depth of 5-8 cm
Maize	Sowing		<ul style="list-style-type: none"> - Sowing may be done by maintaining a spacing of 60cm x 30cm. - Top dressing may be done when the plants is knee high.
	Vegetative to flowering	- Shoot borer	<ul style="list-style-type: none"> - Apply 2-3 granules of Furadan 3G at the whorl of infected plant. - Weeding may be done.
Groundnut & soybean	Land preparation to sowing		<ul style="list-style-type: none"> - 10-12 t/ha or 2.5-3 t/sangam of FYM or compost before 3 - 4 weeks of sowing. It is recommended to apply 44 kg of urea, 372kg of SSP and 67 kg of MOP per hectare as a basal application during final ploughing or incorporated at the time of sowing. Also, avoid land where water stagnation problem exists. - Sowing may be done in prepared field.
Storage			<ul style="list-style-type: none"> - Clean and store the seeds in RC-seed bins after proper drying. Check for germination of seeds or fungal growth.
Horticulture Crops			
Ginger & turmeric	Planting		<ul style="list-style-type: none"> Spacings for planting of ginger (25cm plant to plant and 25-30cm row to row) and turmeric (25cm plant to plant and 40-45cm row to row).
Bhindi	Sowing to vegetative		<ul style="list-style-type: none"> - Sowing of Bhindi bean may be done. - Weeding may be done for crops in vegetative stage.
Cucurbits	Flowering to fruiting	Red Pumpkin Beetle	<ul style="list-style-type: none"> - Use Methyl Eugenol@ 4-5 drops/ 150-200 ml of water as trap against Red Pumpkin Beetle.
Onion	Harvesting and post harvesting		<ul style="list-style-type: none"> - Complete harvesting of mature crop by 27th as there is likely of light to moderate rain from 28th onwards. After harvesting, let it dry for 4-5 days in airy shed. Cut the leaves & roots and sorting & grading may be done.



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Fruits	Small seedlings/ cutting of citrus, papaya & passion fruit		- Minimum life saving irrigation should be given in all nurseries. - Mulching with dried twigs/ vegetables leaves will help to retain moisture till rain come.
Colocassia	Corm treatment		- Corm treatment should be done with Carbendazim @ 2 gm/lit of water for 20-30 minutes and then dry in the shed before sowing. - If the area is insect prone, 8-10 granules of Furadan/pit may be applied at the time of sowing. - Never select damp/ water logged or shady area.
Khasi Mandarin	Grown-up trees		In Khasi Mandarin apply 500g Urea, 1kg SSP & 400g MOP per plant along with 30 kg cowdung manure compost.

Animal Sciences

* Take up measures for mosquito population control at farm premises.

Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
Pig	Above 3 months of age	Swine Fever	- Vaccinate with <i>Swine Fever</i> vaccine as per prescribed dose but de-worm using Panacur tab @ 1.5mg/10kg body weight before vaccination. Don't use Korean strain vaccine as the vaccine gives no protection - Vaccinate all the susceptible animals against the FMD.
Cattle / Buffalo/ Mithun	All age groups except three months or below	- B.Q. and Haemorrhagic Septicaemia - FMD	- Vaccination of <i>B.Q. and H.S.</i> polyvalent (dose as per recommendation) is advised but deworm with appropriate agent before vaccination. - Vaccinate all the susceptible animals against the FMD.
Poultry	All susceptible age groups	Ranikhet Disease	- Birds should be vaccinated against <i>Ranikhet disease</i> but deworm before vaccination.
		<i>Coccidiosis</i>	- Poultry must be provided <i>Coccidiostat/ Supercox</i> (@ 1g/lit of drinking water) + plus 150gm of Glucose and vit K for 5 to 7 days. - Provide clean & safe drinking water by adding Sukrena (scntizer) to avoid <i>Colebacilliosis</i> .
		Management	- Wire net portion of the wall should be covered by hanging polythene sheet to protect from rain. - Litter management: Apply lime powder @ 2kg per 100 sq. ft. area in litter material.

Fisheries

* In case of moderate rainfall, water should not be allowed to drain directly into the ponds as it may contaminate with unwanted elements.

Type of Farming	Stage	Management	Agro-metrological advisories
Carp culture	Brooders	Pond and water	Ensure good quality/ clean water free from unwanted plants and animals with a minimum depth of 1.5 m.
		Feed	Fish feed pellet or rice bran & oil cakes (in ratio 1:1) should be provided @ 3-5% body weight per day in 2-3 splits.
		Health	Spray CIFAX on the surface of the pond water. Male and female brooders must be kept in separate tanks.
	Breeding	pond	<ul style="list-style-type: none"> Pond should be free from silt, weeds, insects and other unwanted fishes. p^H of water must be maintained at 7.0-8.0 Fish hormones like ovaprim, ovatide or Wova-FH can be injected in both the brooders @ 0.5 - 0.7 ml/kg of fish (grass carp).
	Hatcheries	water	<ul style="list-style-type: none"> Water should be clear and clean with pH 7.0-7.5 and dissolved oxygen level should be 6-8 ppm. Hatching can be done in traditional hapas having outer & inner hapas or circular hatcheries. A mild current with fine shower is needed for circular hatcheries. Feed should not be given for 3 days.
	Nurseries	ponds	- Pond should be free from silt, weeds, insects and other unwanted fishes. 20-30 lakhs spawns can be stocked in one hectare water. Water depth should be more than 1.0 m. Feeding should be given @ 5-10% body weight/day.



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Manipur Centre, Lamphelpat, Imphal - 795 004



“Integrated Agromet Advisory Services”

MANIPUR BULLETIN

26th April, 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 April to 1st May, 2013 as given below:

<p><u>Significant past weather for the preceding bi-weekly of Imphal - West (23rd to 25th April, 2013)</u></p> <p>During the past three days the sky was partly cloudy to mainly clear. No rainfall was recorded during past three days. Maximum temperature range observed was 30.0 – 30.7 °C, range of minimum temperature observed was 14.1 – 15.0 °C, mean relative humidity observed in morning and afternoon were 81.67 % and 41.0 % respectively. The average wind speed range was 2.8 – 3.0 km/hr.</p>	<p><u>Weather forecast for next five days of Imphal - West (27th April to 1st May, 2013)</u></p> <p>There is likely to have no rain on 27th then light to moderate rainfall from 28th onward. The sky is likely to be mainly clear on 27th but partly cloudy to cloudy from 28th onward. The maximum temp. is likely to be 28.0 - 32.0 °C. The minimum temp. is likely to be 14.0 – 18.0 °C. The maximum RH is likely to attain a max value of 96 %. Minimum RH is likely to reach a max of 58 %. The average wind speed during next five days may reach upto max. value of 4 km/hr.</p>
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Weather Forecast for next 3 days (upto 0830 hours IST of 29th April, 2013)

Rain/thundershowers would occur at one or two places over northeastern states and is likely to increase from tomorrow onwards

Weather Outlook for subsequent 4 days from 29th April to 3rd May, 2013

Rain/thundershowers would occur at many places over northeastern states

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
Field Crops			
Pre- Kharif Rice	Vegetative		<ul style="list-style-type: none"> - After 7 days of transplanting maintain 5-8 cm of water depth in the crop field. - After 30-35 days of transplanting, completely remove water and top dress with 33 kg Urea and 16 kg MOP per hectare. After 48 hrs irrigate the field and maintain water depth of 5-8 cm
Maize	Sowing		<ul style="list-style-type: none"> - Sowing may be done by maintaining a spacing of 60cm x 30cm. - Top dressing may be done when the plants is knee high.
	Vegetative to flowering	- Shoot borer	<ul style="list-style-type: none"> - Apply 2-3 granules of Furadan 3G at the whorl of infected plant. - Weeding may be done.
Groundnut & soybean	Land preparation to sowing		<ul style="list-style-type: none"> - 10-12 t/ha or 2.5-3 t/sangam of FYM or compost before 3 - 4 weeks of sowing. It is recommended to apply 44 kg of urea, 372kg of SSP and 67 kg of MOP per hectare as a basal application during final ploughing or incorporated at the time of sowing. Also, avoid land where water stagnation problem exists. - Sowing may be done in prepared field.
Storage			<ul style="list-style-type: none"> - Clean and store the seeds in RC-seed bins after proper drying. Check for germination of seeds or fungal growth.
Horticulture Crops			
Ginger & turmeric	Planting		<ul style="list-style-type: none"> Spacings for planting of ginger (25cm plant to plant and 25-30cm row to row) and turmeric (25cm plant to plant and 40-45cm row to row).
Bhindi	Sowing to vegetative		<ul style="list-style-type: none"> - Sowing of Bhindi bean may be done. - Weeding may be done for crops in vegetative stage.
Cucurbits	Flowering to fruiting	Red Pumpkin Beetle	<ul style="list-style-type: none"> - Use Methyl Eugenol@ 4-5 drops/ 150-200 ml of water as trap against Red Pumpkin Beetle.
Onion	Harvesting and post harvesting		<ul style="list-style-type: none"> - Complete harvesting of mature crop by 27th as there is likely of light to moderate rain from 28th onwards. After harvesting, let it dry for 4-5 days in airy shed. Cut the leaves & roots and sorting & grading may be done.



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Fruits	Small seedlings/ cutting of citrus, papaya & passion fruit		- Minimum life saving irrigation should be given in all nurseries. - Mulching with dried twigs/ vegetables leaves will help to retain moisture till rain come.
Colocassia	Corm treatment		- Corm treatment should be done with Carbendazim @ 2 gm/lit of water for 20-30 minutes and then dry in the shed before sowing. - If the area is insect prone, 8-10 granules of Furadan/pit may be applied at the time of sowing. - Never select damp/ water logged or shady area.
Khasi Mandarin	Grown-up trees		In Khasi Mandarin apply 500g Urea, 1kg SSP & 400g MOP per plant along with 30 kg cowdung manure compost.

Animal Sciences

* Take up measures for mosquito population control at farm premises.

Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
Pig	Above 3 months of age	Swine Fever	- Vaccinate with <i>Swine Fever</i> vaccine as per prescribed dose but de-worm using Panacur tab @ 1.5mg/10kg body weight before vaccination. Don't use Korean strain vaccine as the vaccine gives no protection - Vaccinate all the susceptible animals against the FMD.
Cattle / Buffalo/ Mithun	All age groups except three months or below	- B.Q. and Haemorrhagic Septicaemia - FMD	- Vaccination of <i>B.Q. and H.S.</i> polyvalent (dose as per recommendation) is advised but deworm with appropriate agent before vaccination. - Vaccinate all the susceptible animals against the FMD.
Poultry	All susceptible age groups	Ranikhet Disease	- Birds should be vaccinated against <i>Ranikhet disease</i> but deworm before vaccination.
		<i>Coccidiosis</i>	- Poultry must be provided <i>Coccidiostat/ Supercox</i> (@ 1g/lit of drinking water) + plus 150gm of Glucose and vit K for 5 to 7 days. - Provide clean & safe drinking water by adding Sukrena (scntizer) to avoid <i>Colebacilliosis</i> .
		Management	- Wire net portion of the wall should be covered by hanging polythene sheet to protect from rain. - Litter management: Apply lime powder @ 2kg per 100 sq. ft. area in litter material.

Fisheries

* In case of moderate rainfall, water should not be allowed to drain directly into the ponds as it may contaminate with unwanted elements.

Type of Farming	Stage	Management	Agro-metrological advisories
Carp culture	Brooders	Pond and water	Ensure good quality/ clean water free from unwanted plants and animals with a minimum depth of 1.5 m.
		Feed	Fish feed pellet or rice bran & oil cakes (in ratio 1:1) should be provided @ 3-5% body weight per day in 2-3 splits.
		Health	Spray CIFAX on the surface of the pond water. Male and female brooders must be kept in separate tanks.
	Breeding	pond	<ul style="list-style-type: none"> Pond should be free from silt, weeds, insects and other unwanted fishes. p^H of water must be maintained at 7.0-8.0 Fish hormones like ovaprim, ovatide or Wova-FH can be injected in both the brooders @ 0.5 - 0.7 ml/kg of fish (grass carp).
	Hatcheries	water	<ul style="list-style-type: none"> Water should be clear and clean with pH 7.0-7.5 and dissolved oxygen level should be 6-8 ppm. Hatching can be done in traditional hapas having outer & inner hapas or circular hatcheries. A mild current with fine shower is needed for circular hatcheries. Feed should not be given for 3 days.
	Nurseries	ponds	- Pond should be free from silt, weeds, insects and other unwanted fishes. 20-30 lakhs spawns can be stocked in one hectare water. Water depth should be more than 1.0 m. Feeding should be given @ 5-10% body weight/day.



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“Integrated Agromet Advisory Services”

MANIPUR BULLETIN

26th April, 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 April to 1st May, 2013 as given below:

<u>Significant past weather for the preceding bi-weekly of Imphal - West (23rd to 25th April, 2013)</u>	<u>Weather forecast for next five days of Senapati (27th April to 1st May, 2013)</u>
During the past three days the sky was partly cloudy to mainly clear. No rainfall was recorded during past three days. Maximum temperature range observed was 30.0 – 30.7 °C, range of minimum temperature observed was 14.1 – 15.0 °C, mean relative humidity observed in morning and afternoon were 81.67 % and 41.0 % respectively. The average wind speed range was 2.8 – 3.0 km/hr.	There is likely to have light to moderate rainfall during next five days. The sky is likely to be partly cloudy to cloudy. The maximum temp. is likely to be 27.0 - 30.0 °C. The minimum temp. is likely to be 13.0 – 17.0 °C. The maximum RH is likely to attain a max value of 93 %. Minimum RH is likely to reach a max of 57 %. The average wind speed during next five days may reach upto max. value of 4 km/hr.

Weather Forecast for next 3 days (upto 0830 hours IST of 29th April, 2013)

Rain/thundershowers would occur at one or two places over northeastern states and is likely to increase from tomorrow onwards

Weather Outlook for subsequent 4 days from 29th April to 3rd May, 2013

Rain/thundershowers would occur at many places over northeastern states

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
Field Crops			
Pre- Kharif Rice	Vegetative		<ul style="list-style-type: none"> - After 7 days of transplanting maintain 5-8 cm of water depth in the crop field. - After 30-35 days of transplanting, completely remove water and top dress with 33 kg Urea and 16 kg MOP per hectare. After 48 hrs irrigate the field and maintain water depth of 5-8 cm
Maize	Sowing		<ul style="list-style-type: none"> - Sowing may be done by maintaining a spacing of 60cm x 30cm. - Top dressing may be done when the plants is knee high.
	Vegetative to flowering	- Shoot borer	<ul style="list-style-type: none"> - Apply 2-3 granules of Furadan 3G at the whorl of infected plant. - Weeding may be done.
Soybean	Land preparation to sowing		<ul style="list-style-type: none"> - 10-12 t/ha or 2.5-3 t/sangam of FYM or compost before 3 - 4 weeks of sowing. It is recommended to apply 44 kg of urea, 372kg of SSP and 67 kg of MOP per hectare as a basal application during final ploughing or incorporated at the time of sowing. Also, avoid land where water stagnation problem exists. - Sowing may be done in prepared field.
Storage			<ul style="list-style-type: none"> - Clean and store the seeds in RC-seed bins after proper drying. Check for germination of seeds or fungal growth.
Horticulture Crops			
Ginger & turmeric	Planting		<ul style="list-style-type: none"> Spacings for planting of ginger (25cm plant to plant and 25-30cm row to row) and turmeric (25cm plant to plant and 40-45cm row to row).
Cucurbits	Flowering to fruiting	Red Pumpkin Beetle	<ul style="list-style-type: none"> - Use Methyl Euginol @ 4-5 drops/ 150-200 ml of water as trap against Red Pumpkin Beetle.
Fruits	Small seedlings/ cutting of citrus, papaya & passion fruit		<ul style="list-style-type: none"> - Minimum life saving irrigation should be given in all nurseries. - Mulching with dried twigs/ vegetables leaves will help to retain moisture till rain come.
Colocassia	Corm treatment		<ul style="list-style-type: none"> - Corm treatment should be done with Carbendazim @ 2 gm/lit of water for 20-30 minutes and then dry in the shed before sowing. - If the area is insect prone, 8-10 granules of Furadan/pit may be applied at



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			the time of sowing. - Never select damp/ water logged or shady area.
Khasi Mandarin	Grown-up trees		In Khasi Mandarin apply 500g Urea, 1kg SSP & 400g MOP per plant along with 30 kg cowdung manure compost.

Animal Sciences

* Take up measures for mosquito population control at farm premises.

Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
Pig	Above 3 months of age	Swine Fever	- Vaccinate with <i>Swine Fever</i> vaccine as per prescribed dose but de-worm using Panacur tab @ 1.5mg/10kg body weight before vaccination. Don't use Korean strain vaccine as the vaccine gives no protection - Vaccinate all the susceptible animals against the FMD.
Cattle / Buffalo/ Mithun	All age groups except three months or below	- B.Q. and Haemorrhagic Septicaemia - FMD	- Vaccination of <i>B.Q. and H.S.</i> polyvalent (dose as per recommendation) is advised but deworm with appropriate agent before vaccination. - Vaccinate all the susceptible animals against the FMD.
Poultry	All susceptible age groups	Ranikhet Disease	- Birds should be vaccinated against <i>Ranikhet disease</i> but deworm before vaccination.
		<i>Coccidiosis</i>	- Poultry must be provided <i>Coccidiostat/ Supercox</i> (@ 1g/lit of drinking water) + plus 150gm of Glucose and vit K for 5 to 7 days. - Provide clean & safe drinking water by adding Sukrena (scitizer) to avoid <i>Colebacilliosis</i> .
		Management	- Wire net portion of the wall should be covered by hanging polythene sheet to protect from rain. - Litter management: Apply lime powder @ 2kg per 100 sq. ft. area in litter material.

Fisheries

* In case of moderate rainfall, water should not be allowed to drain directly into the ponds as it may contaminate with unwanted elements.

Type of Farming	Stage	Management	Agro-metrological advisories
Carp culture	Brooders	Pond and water	Ensure good quality/ clean water free from unwanted plants and animals with a minimum depth of 1.5 m.
		Feed	Fish feed pellet or rice bran & oil cakes (in ratio 1:1) should be provided @ 3-5% body weight per day in 2-3 splits.
		Health	Spray CIFAX on the surface of the pond water. Male and female brooders must be kept in separate tanks.
	Breeding	pond	<ul style="list-style-type: none"> ▪ Pond should be free from silt, weeds, insects and other unwanted fishes. ▪ p^H of water must be maintained at 7.0-8.0 ▪ Fish hormones like ovaprim, ovatide or Wova-FH can be injected in both the brooders @ <i>0.5 - 0.7 ml/kg</i> of fish (grass carp).
	Hatcheries	water	<ul style="list-style-type: none"> ▪ Water should be clear and clean with pH 7.0-7.5 and dissolved oxygen level should be 6-8 ppm. ▪ Hatching can be done in traditional hapas having outer & inner hapas or circular hatcheries. A mild current with fine shower is needed for circular hatcheries. Feed should not be given for 3 days.
	Nurseries	ponds	- Pond should be free from silt, weeds, insects and other unwanted fishes. 20-30 lakhs spawns can be stocked in one hectare water. Water depth should be more than 1.0 m. Feeding should be given @ 5-10% body weight/day.

I. Meghachandra Singh
 Scientist i/c, IAAS



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Manipur Centre, Lamphelpat, Imphal - 795 004



“Integrated Agromet Advisory Services”

MANIPUR BULLETIN

26th April, 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 April to 1st May, 2013 as given below:

<p><u>Significant past weather for the preceding bi-weekly of Imphal - West (23rd to 25th April, 2013)</u></p> <p>During the past three days the sky was partly cloudy to mainly clear. No rainfall was recorded during past three days. Maximum temperature range observed was 30.0 – 30.7 °C, range of minimum temperature observed was 14.1 – 15.0 °C, mean relative humidity observed in morning and afternoon were 81.67 % and 41.0 % respectively. The average wind speed range was 2.8 – 3.0 km/hr.</p>	<p><u>Weather forecast for next five days of Tamenglong (27th April to 1st May, 2013)</u></p> <p>There is likely to have no rain on 27th then light to moderate rainfall from 28th onward. The sky is likely to be partly cloudy to cloudy. The maximum temp. is likely to be 28.0 - 32.0 °C. The minimum temp. is likely to be 14.0 – 19.0 °C. The maximum RH is likely to attain a max value of 95 %. Minimum RH is likely to reach a max of 53 %. The average wind speed during next five days may reach upto max. value of 4 km/hr.</p>
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Weather Forecast for next 3 days (upto 0830 hours IST of 29th April, 2013)

Rain/thundershowers would occur at one or two places over northeastern states and is likely to increase from tomorrow onwards

Weather Outlook for subsequent 4 days from 29th April to 3rd May, 2013

Rain/thundershowers would occur at many places over northeastern states

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
Field Crops			
Pre- Kharif Rice	Vegetative		<ul style="list-style-type: none"> - After 7 days of transplanting maintain 5-8 cm of water depth in the crop field. - After 30-35 days of transplanting, completely remove water and top dress with 33 kg Urea and 16 kg MOP per hectare. After 48 hrs irrigate the field and maintain water depth of 5-8 cm
Maize	Sowing		<ul style="list-style-type: none"> - Sowing may be done by maintaining a spacing of 60cm x 30cm. - Top dressing may be done when the plants is knee high.
	Vegetative to flowering	- Shoot borer	<ul style="list-style-type: none"> - Apply 2-3 granules of Furadan 3G at the whorl of infected plant. - Weeding may be done.
Groundnut & soybean	Land preparation to sowing		<ul style="list-style-type: none"> - 10-12 t/ha or 2.5-3 t/sangam of FYM or compost before 3 - 4 weeks of sowing. It is recommended to apply 44 kg of urea, 372kg of SSP and 67 kg of MOP per hectare as a basal application during final ploughing or incorporated at the time of sowing. Also, avoid land where water stagnation problem exists. - Sowing may be done in prepared field.
Storage			<ul style="list-style-type: none"> - Clean and store the seeds in RC-seed bins after proper drying. Check for germination of seeds or fungal growth.
Horticulture Crops			
Ginger & turmeric	Planting		<ul style="list-style-type: none"> Spacings for planting of ginger (25cm plant to plant and 25-30cm row to row) and turmeric (25cm plant to plant and 40-45cm row to row).
Bhindi	Sowing to vegetative		<ul style="list-style-type: none"> - Sowing of Bhindi bean may be done. - Weeding may be done for crops in vegetative stage.
Cucurbits	Flowering to fruiting	Red Pumpkin Beetle	<ul style="list-style-type: none"> - Use Methyl Euginol@ 4-5 drops/ 150-200 ml of water as trap against Red Pumpkin Beetle.
Onion	Harvesting and post harvesting		<ul style="list-style-type: none"> - Complete harvesting of mature crop by 27th as there is likely of light to moderate rain from 28th onwards. After harvesting, let it dry for 4-5 days in airy shed. Cut the leaves & roots and sorting & grading may be done.



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Fruits	Small seedlings/ cutting of citrus, papaya & passion fruit		- Minimum life saving irrigation should be given in all nurseries. - Mulching with dried twigs/ vegetables leaves will help to retain moisture till rain come.
Colocassia	Corm treatment		- Corm treatment should be done with Carbendazim @ 2 gm/lit of water for 20-30 minutes and then dry in the shed before sowing. - If the area is insect prone, 8-10 granules of Furadan/pit may be applied at the time of sowing. - Never select damp/ water logged or shady area.
Khasi Mandarin	Grown-up trees		In Khasi Mandarin apply 500g Urea, 1kg SSP & 400g MOP per plant along with 30 kg cowdung manure compost.

Animal Sciences

* Take up measures for mosquito population control at farm premises.

Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
Pig	Above 3 months of age	Swine Fever	- Vaccinate with <i>Swine Fever</i> vaccine as per prescribed dose but de-worm using Panacur tab @ 1.5mg/10kg body weight before vaccination. Don't use Korean strain vaccine as the vaccine gives no protection - Vaccinate all the susceptible animals against the FMD.
Cattle / Buffalo/ Mithun	All age groups except three months or below	- B.Q. and Haemorrhagic Septicaemia - FMD	- Vaccination of <i>B.Q. and H.S.</i> polyvalent (dose as per recommendation) is advised but deworm with appropriate agent before vaccination. - Vaccinate all the susceptible animals against the FMD.
Poultry	All susceptible age groups	Ranikhet Disease	- Birds should be vaccinated against <i>Ranikhet disease</i> but deworm before vaccination.
		<i>Coccidiosis</i>	- Poultry must be provided <i>Coccidiostat/ Supercox</i> (@ 1g/lit of drinking water) + plus 150gm of Glucose and vit K for 5 to 7 days. - Provide clean & safe drinking water by adding Sukrena (scntizer) to avoid <i>Colebacilliosis</i> .
		Management	- Wire net portion of the wall should be covered by hanging polythene sheet to protect from rain. - Litter management: Apply lime powder @ 2kg per 100 sq. ft. area in litter material.

Fisheries

* In case of moderate rainfall, water should not be allowed to drain directly into the ponds as it may contaminate with unwanted elements.

Type of Farming	Stage	Management	Agro-metrological advisories
Carp culture	Brooders	Pond and water	Ensure good quality/ clean water free from unwanted plants and animals with a minimum depth of 1.5 m.
		Feed	Fish feed pellet or rice bran & oil cakes (in ratio 1:1) should be provided @ 3-5% body weight per day in 2-3 splits.
		Health	Spray CIFAX on the surface of the pond water. Male and female brooders must be kept in separate tanks.
	Breeding	pond	<ul style="list-style-type: none"> Pond should be free from silt, weeds, insects and other unwanted fishes. p^H of water must be maintained at 7.0-8.0 Fish hormones like ovaprim, ovatide or Wova-FH can be injected in both the brooders @ 0.5 - 0.7 ml/kg of fish (grass carp).
	Hatcheries	water	<ul style="list-style-type: none"> Water should be clear and clean with pH 7.0-7.5 and dissolved oxygen level should be 6-8 ppm. Hatching can be done in traditional hapas having outer & inner hapas or circular hatcheries. A mild current with fine shower is needed for circular hatcheries. Feed should not be given for 3 days.
	Nurseries	ponds	- Pond should be free from silt, weeds, insects and other unwanted fishes. 20-30 lakhs spawns can be stocked in one hectare water. Water depth should be more than 1.0 m. Feeding should be given @ 5-10% body weight/day.



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MANIPUR BULLETIN

26th April, 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 April to 1st May, 2013 as given below:

<p><u>Significant past weather for the preceding bi-weekly of Imphal - West (23rd to 25th April, 2013)</u></p> <p>During the past three days the sky was partly cloudy to mainly clear. No rainfall was recorded during past three days. Maximum temperature range observed was 30.0 – 30.7 °C, range of minimum temperature observed was 14.1 – 15.0 °C, mean relative humidity observed in morning and afternoon were 81.67 % and 41.0 % respectively. The average wind speed range was 2.8 – 3.0 km/hr.</p>	<p><u>Weather forecast for next five days of Thoubal (27th April to 1st May, 2013)</u></p> <p>There is likely to have no rain on 27th then light to moderate rainfall from 28th onward. The sky is likely to be mainly clear on 27th but partly cloudy to cloudy from 28th onward. The maximum temp. is likely to be 28.0 - 31.0 °C. The minimum temp. is likely to be 14.0 – 17.0 °C. The maximum RH is likely to attain a max value of 89 %. Minimum RH is likely to reach a max of 51 %. 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 29th April, 2013)

Rain/thundershowers would occur at one or two places over northeastern states and is likely to increase from tomorrow onwards

Weather Outlook for subsequent 4 days from 29th April to 3rd May, 2013

Rain/thundershowers would occur at many places over northeastern states

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
Field Crops			
Pre- Kharif Rice	Vegetative		<ul style="list-style-type: none"> - After 7 days of transplanting maintain 5-8 cm of water depth in the crop field. - After 30-35 days of transplanting, completely remove water and top dress with 33 kg Urea and 16 kg MOP per hectare. After 48 hrs irrigate the field and maintain water depth of 5-8 cm
Maize	Sowing		<ul style="list-style-type: none"> - Sowing may be done by maintaining a spacing of 60cm x 30cm. - Top dressing may be done when the plants is knee high.
	Vegetative to flowering	- Shoot borer	<ul style="list-style-type: none"> - Apply 2-3 granules of Furadan 3G at the whorl of infected plant. - Weeding may be done.
Groundnut & soybean	Land preparation to sowing		<ul style="list-style-type: none"> - 10-12 t/ha or 2.5-3 t/sangam of FYM or compost before 3 - 4 weeks of sowing. It is recommended to apply 44 kg of urea, 372kg of SSP and 67 kg of MOP per hectare as a basal application during final ploughing or incorporated at the time of sowing. Also, avoid land where water stagnation problem exists. - Sowing may be done in prepared field.
Storage			<ul style="list-style-type: none"> - Clean and store the seeds in RC-seed bins after proper drying. Check for germination of seeds or fungal growth.
Horticulture Crops			
Ginger & turmeric	Planting		<ul style="list-style-type: none"> Spacings for planting of ginger (25cm plant to plant and 25-30cm row to row) and turmeric (25cm plant to plant and 40-45cm row to row).
Bhindi	Sowing to vegetative		<ul style="list-style-type: none"> - Sowing of Bhindi bean may be done. - Weeding may be done for crops in vegetative stage.
Cucurbits	Flowering to fruiting	Red Pumpkin Beetle	<ul style="list-style-type: none"> - Use Methyl Euginol@ 4-5 drops/ 150-200 ml of water as trap against Red Pumpkin Beetle.
Onion	Harvesting and post harvesting		<ul style="list-style-type: none"> - Complete harvesting of mature crop by 27th as there is likely of light to moderate rain from 28th onwards. After harvesting, let it dry for 4-5 days in airy shed. Cut the leaves & roots and sorting & grading may be done.



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Fruits	Small seedlings/ cutting of citrus, papaya & passion fruit		- Minimum life saving irrigation should be given in all nurseries. - Mulching with dried twigs/ vegetables leaves will help to retain moisture till rain come.
Colocassia	Corm treatment		- Corm treatment should be done with Carbendazim @ 2 gm/lit of water for 20-30 minutes and then dry in the shed before sowing. - If the area is insect prone, 8-10 granules of Furadan/pit may be applied at the time of sowing. - Never select damp/ water logged or shady area.
Khasi Mandarin	Grown-up trees		In Khasi Mandarin apply 500g Urea, 1kg SSP & 400g MOP per plant along with 30 kg cowdung manure compost.

Animal Sciences

* Take up measures for mosquito population control at farm premises.

Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
Pig	Above 3 months of age	Swine Fever	- Vaccinate with <i>Swine Fever</i> vaccine as per prescribed dose but de-worm using Panacur tab @ 1.5mg/10kg body weight before vaccination. Don't use Korean strain vaccine as the vaccine gives no protection - Vaccinate all the susceptible animals against the FMD.
Cattle / Buffalo/ Mithun	All age groups except three months or below	- B.Q. and Haemorrhagic Septicaemia - FMD	- Vaccination of <i>B.Q. and H.S.</i> polyvalent (dose as per recommendation) is advised but deworm with appropriate agent before vaccination. - Vaccinate all the susceptible animals against the FMD.
Poultry	All susceptible age groups	Ranikhet Disease	- Birds should be vaccinated against <i>Ranikhet disease</i> but deworm before vaccination.
		<i>Coccidiosis</i>	- Poultry must be provided <i>Coccidiostat/ Supercox</i> (@ 1g/lit of drinking water) + plus 150gm of Glucose and vit K for 5 to 7 days. - Provide clean & safe drinking water by adding Sukrena (scntizer) to avoid <i>Colebacilliosis</i> .
		Management	- Wire net portion of the wall should be covered by hanging polythene sheet to protect from rain. - Litter management: Apply lime powder @ 2kg per 100 sq. ft. area in litter material.

Fisheries

* In case of moderate rainfall, water should not be allowed to drain directly into the ponds as it may contaminate with unwanted elements.

Type of Farming	Stage	Management	Agro-metrological advisories
Carp culture	Brooders	Pond and water	Ensure good quality/ clean water free from unwanted plants and animals with a minimum depth of 1.5 m.
		Feed	Fish feed pellet or rice bran & oil cakes (in ratio 1:1) should be provided @ 3-5% body weight per day in 2-3 splits.
		Health	Spray CIFAX on the surface of the pond water. Male and female brooders must be kept in separate tanks.
	Breeding	pond	<ul style="list-style-type: none"> Pond should be free from silt, weeds, insects and other unwanted fishes. p^H of water must be maintained at 7.0-8.0 Fish hormones like ovaprim, ovatide or Wova-FH can be injected in both the brooders @ 0.5 - 0.7 ml/kg of fish (grass carp).
	Hatcheries	water	<ul style="list-style-type: none"> Water should be clear and clean with pH 7.0-7.5 and dissolved oxygen level should be 6-8 ppm. Hatching can be done in traditional hapas having outer & inner hapas or circular hatcheries. A mild current with fine shower is needed for circular hatcheries. Feed should not be given for 3 days.
	Nurseries	ponds	- Pond should be free from silt, weeds, insects and other unwanted fishes. 20-30 lakhs spawns can be stocked in one hectare water. Water depth should be more than 1.0 m. Feeding should be given @ 5-10% body weight/day.



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MANIPUR BULLETIN

26th April, 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 April to 1st May, 2013 as given below:

<p><u>Significant past weather for the preceding bi-weekly of Imphal - West (23rd to 25th April, 2013)</u></p> <p>During the past three days the sky was partly cloudy to mainly clear. No rainfall was recorded during past three days. Maximum temperature range observed was 30.0 – 30.7 °C, range of minimum temperature observed was 14.1 – 15.0 °C, mean relative humidity observed in morning and afternoon were 81.67 % and 41.0 % respectively. The average wind speed range was 2.8 – 3.0 km/hr.</p>	<p><u>Weather forecast for next five days of Ukhrul (27th April to 1st May, 2013)</u></p> <p>There is likely to have light to moderate rainfall during next five days. The sky is likely to be partly cloudy to cloudy. The maximum temp. is likely to be 26.0 – 29.0 °C. The minimum temp. is likely to be 12.0 – 16.0 °C. The maximum RH is likely to attain a max value of 83 %. Minimum RH is likely to reach a max of 41 %. The average wind speed during next five days may reach upto max. value of 5 km/hr.</p>
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Weather Forecast for next 3 days (upto 0830 hours IST of 29th April, 2013)

Rain/thundershowers would occur at one or two places over northeastern states and is likely to increase from tomorrow onwards

Weather Outlook for subsequent 4 days from 29th April to 3rd May, 2013

Rain/thundershowers would occur at many places over northeastern states

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
Field Crops			
Pre- Kharif Rice	Vegetative		<ul style="list-style-type: none"> - After 7 days of transplanting maintain 5-8 cm of water depth in the crop field. - After 30-35 days of transplanting, completely remove water and top dress with 33 kg Urea and 16 kg MOP per hectare. After 48 hrs irrigate the field and maintain water depth of 5-8 cm
Maize	Sowing		<ul style="list-style-type: none"> - Sowing may be done by maintaining a spacing of 60cm x 30cm. - Top dressing may be done when the plants is knee high.
	Vegetative to flowering	- Shoot borer	<ul style="list-style-type: none"> - Apply 2-3 granules of Furadan 3G at the whorl of infected plant. - Weeding may be done.
Soybean	Land preparation to sowing		<ul style="list-style-type: none"> - 10-12 t/ha or 2.5-3 t/sangam of FYM or compost before 3 - 4 weeks of sowing. It is recommended to apply 44 kg of urea, 372kg of SSP and 67 kg of MOP per hectare as a basal application during final ploughing or incorporated at the time of sowing. Also, avoid land where water stagnation problem exists. - Sowing may be done in prepared field.
Storage			<ul style="list-style-type: none"> - Clean and store the seeds in RC-seed bins after proper drying. Check for germination of seeds or fungal growth.
Horticulture Crops			
Ginger & turmeric	Planting		<ul style="list-style-type: none"> Spacings for planting of ginger (25cm plant to plant and 25-30cm row to row) and turmeric (25cm plant to plant and 40-45cm row to row).
Cucurbits	Flowering to fruiting	Red Pumpkin Beetle	<ul style="list-style-type: none"> - Use Methyl Eugenol @ 4-5 drops/ 150-200 ml of water as trap against Red Pumpkin Beetle.
Fruits	Small seedlings/ cutting of citrus, papaya & passion fruit		<ul style="list-style-type: none"> - Minimum life saving irrigation should be given in all nurseries. - Mulching with dried twigs/ vegetables leaves will help to retain moisture till rain come.
Colocassia	Corm treatment		<ul style="list-style-type: none"> - Corm treatment should be done with Carbendazim @ 2 gm/lit of water for 20-30 minutes and then dry in the shed before sowing. - If the area is insect prone, 8-10 granules of Furadan/pit may be applied at



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			the time of sowing. - Never select damp/ water logged or shady area.
Khasi Mandarin	Grown-up trees		In Khasi Mandarin apply 500g Urea, 1kg SSP & 400g MOP per plant along with 30 kg cowdung manure compost.

Animal Sciences

* Take up measures for mosquito population control at farm premises.

Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
Pig	Above 3 months of age	Swine Fever	- Vaccinate with <i>Swine Fever</i> vaccine as per prescribed dose but de-worm using Panacur tab @ 1.5mg/10kg body weight before vaccination. Don't use Korean strain vaccine as the vaccine gives no protection - Vaccinate all the susceptible animals against the FMD.
Cattle / Buffalo/ Mithun	All age groups except three months or below	- B.Q. and Haemorrhagic Septicaemia - FMD	- Vaccination of <i>B.Q. and H.S.</i> polyvalent (dose as per recommendation) is advised but deworm with appropriate agent before vaccination. - Vaccinate all the susceptible animals against the FMD.
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		Management	- Wire net portion of the wall should be covered by hanging polythene sheet to protect from rain. - Litter management: Apply lime powder @ 2kg per 100 sq. ft. area in litter material.

Fisheries

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Carp culture	Brooders	Pond and water	Ensure good quality/ clean water free from unwanted plants and animals with a minimum depth of 1.5 m.
		Feed	Fish feed pellet or rice bran & oil cakes (in ratio 1:1) should be provided @ 3-5% body weight per day in 2-3 splits.
		Health	Spray CIFAX on the surface of the pond water. Male and female brooders must be kept in separate tanks.
	Breeding	pond	<ul style="list-style-type: none"> ▪ Pond should be free from silt, weeds, insects and other unwanted fishes. ▪ p^H of water must be maintained at 7.0-8.0 ▪ Fish hormones like ovaprim, ovatide or Wova-FH can be injected in both the brooders @ <i>0.5 - 0.7 ml/kg</i> of fish (grass carp).
	Hatcheries	water	<ul style="list-style-type: none"> ▪ Water should be clear and clean with pH 7.0-7.5 and dissolved oxygen level should be 6-8 ppm. ▪ Hatching can be done in traditional hapas having outer & inner hapas or circular hatcheries. A mild current with fine shower is needed for circular hatcheries. Feed should not be given for 3 days.
	Nurseries	ponds	- Pond should be free from silt, weeds, insects and other unwanted fishes. 20-30 lakhs spawns can be stocked in one hectare water. Water depth should be more than 1.0 m. Feeding should be given @ 5-10% body weight/day.

I. Meghachandra Singh
 Scientist i/c, IAAS