



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



“Integrated Agromet Advisory Services”

MANIPUR BULLETIN

30th 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 1st to 5th 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 four days the sky was partly cloudy to mainly cloudy. 3.9 mm rainfall was recorded during past four days. Maximum temperature range observed was 27.5 – 31.1 °C, range of minimum temperature observed was 14.0 – 18.0 °C, mean relative humidity observed in morning and afternoon were 87.5 % and 54.25 % respectively. The average wind speed range was 2.0 – 4.7 km/hr.</p>	<p><u>Weather forecast for next five days of Imphal - East (27th April to 1st May, 2013)</u></p> <p>It is likely to have light to moderate rains during next five days. The sky is likely to be partly cloudy to mainly cloudy with maximum temp. of 29.0 - 31.0 °C and minimum temp. of 17.0 – 22.0 °C. The maximum RH is likely to attain a max value of 98 % and minimum RH of 71 %. The average wind speed during next five days may reach upto max. value of 2 km/hr.</p>
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Main Weather Observation

Low/ medium and convective clouds are seen over northeastern states

Weather Forecast for next 3 days (upto 0830 hours IST of 3rd May, 2013)

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

Weather warning during next 3 days

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

Weather Outlook for subsequent 4 days from 3rd to 7th 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			
Rice	(Pre-kharif) Vegetative		- 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
	Kharif		Field may be ploughed.
Maize	Sowing		- Sowing may be done by maintaining a spacing of 60cm x 30cm. - Top dressing may be done when the plants is knee high.
	Silking stage		- Weeding may be done.
Groundnut & soybean	Land preparation to sowing		- Sowing may be done in prepared field.
Blackgram & Rice bean	Land preparation		Land preparation may be started for sowing. It should be made weed free before sowing.
Storage			- 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		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	- Use Methyl Euginol @ 4-5 drops/ 150-200 ml of water as trap against Red Pumpkin Beetle.
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.



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“Integrated Agromet Advisory Services”

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 comes.
Orange	Grown-up trees		In orange, 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 FMD	- 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. - 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.
		Management	- Provide clean & safe drinking water by adding Sokrena (scnitizer) to avoid <i>Colebacilliosis</i> . 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. 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. 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	- Stocked 20-30 lakhs spawns 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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“Integrated Agromet Advisory Services”

MANIPUR BULLETIN

30th 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 1st to 5th 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 four days the sky was partly cloudy to mainly cloudy. 3.9 mm rainfall was recorded during past four days. Maximum temperature range observed was 27.5 – 31.1 °C, range of minimum temperature observed was 14.0 – 18.0 °C, mean relative humidity observed in morning and afternoon were 87.5 % and 54.25 % respectively. The average wind speed range was 2.0 – 4.7 km/hr.</p>	<p><u>Weather forecast for next five days of Imphal - West (27th April to 1st May, 2013)</u></p> <p>It is likely to have light to moderate rains during next five days. The sky is likely to be partly cloudy to mainly cloudy with maximum temp. of 29.0 - 32.0 °C and minimum temp. of 18.0 – 22.0 °C. The maximum RH is likely to attain a max value of 98 % and minimum RH of 66 %. The average wind speed during next five days may reach upto max. value of 2 km/hr.</p>
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Main Weather Observation

Low/ medium and convective clouds are seen over northeastern states

Weather Forecast for next 3 days (upto 0830 hours IST of 3rd May, 2013)

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

Weather warning during next 3 days

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

Weather Outlook for subsequent 4 days from 3rd to 7th 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			
Rice	(Pre-kharif) Vegetative		- 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
	Kharif		Field may be ploughed.
Maize	Sowing		- Sowing may be done by maintaining a spacing of 60cm x 30cm. - Top dressing may be done when the plants is knee high.
	Silking stage		- Weeding may be done.
Groundnut & soybean	Land preparation to sowing		- Sowing may be done in prepared field.
Blackgram & Rice bean	Land preparation		Land preparation may be started for sowing. It should be made weed free before sowing.
Storage			- 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		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	- Use Methyl Euginol @ 4-5 drops/ 150-200 ml of water as trap against Red Pumpkin Beetle.
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.



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“Integrated Agromet Advisory Services”

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 comes.
Orange	Grown-up trees		In orange, 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 FMD	- 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. - 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.
		Management	- Provide clean & safe drinking water by adding Sokrena (scnitizer) to avoid <i>Colebacilliosis</i> . 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. 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. 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	- Stocked 20-30 lakhs spawns 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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“Integrated Agromet Advisory Services”

MANIPUR BULLETIN

30th 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 1st to 5th 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 four days the sky was partly cloudy to mainly cloudy. 3.9 mm rainfall was recorded during past four days. Maximum temperature range observed was 27.5 – 31.1 °C, range of minimum temperature observed was 14.0 – 18.0 °C, mean relative humidity observed in morning and afternoon were 87.5 % and 54.25 % respectively. The average wind speed range was 2.0 – 4.7 km/hr.	It is likely to have light to moderate rains during next five days. The sky is likely to be partly cloudy to mainly cloudy with maximum temp. of 27.0 - 30.0 °C and minimum temp. of 14.0 – 19.0 °C. The maximum RH is likely to attain a max value of 98% and minimum RH of 66 %. The average wind speed during next five days may reach upto max. value of 3 km/hr.

Main Weather Observation

Low/ medium and convective clouds are seen over northeastern states

Weather Forecast for next 3 days (upto 0830 hours IST of 3rd May, 2013)

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

Weather warning during next 3 days

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

Weather Outlook for subsequent 4 days from 3rd to 7th 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			
Rice	(Pre-kharif) Vegetative		- 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
	Kharif		Field may be ploughed.
Maize	Sowing		- Sowing may be done by maintaining a spacing of 60cm x 30cm. - Top dressing may be done when the plants is knee high.
	Silking stage		- Weeding may be done.
Soybean	Land preparation to sowing		- Sowing may be done in prepared field.
Blackgram & Rice bean	Land preparation		Land preparation may be started for sowing. It should be made weed free before sowing.
Storage			- 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		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	- Use Methyl Euginol @ 4-5 drops/ 150-200 ml of water as trap against Red Pumpkin Beetle.
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.



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“Integrated Agromet Advisory Services”

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 comes.
Orange	Grown-up trees		In orange, 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 FMD	- 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. - 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.
		Management	- Provide clean & safe drinking water by adding Sokrena (scnitizer) to avoid <i>Colebacilliosis</i> . 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. 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. 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	- Stocked 20-30 lakhs spawns 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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“Integrated Agromet Advisory Services”

MANIPUR BULLETIN

30th 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 1st to 5th 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 Tamenglong (27th April to 1st May, 2013)</u>
During the past four days the sky was partly cloudy to mainly cloudy. 3.9 mm rainfall was recorded during past four days. Maximum temperature range observed was 27.5 – 31.1 °C, range of minimum temperature observed was 14.0 – 18.0 °C, mean relative humidity observed in morning and afternoon were 87.5 % and 54.25 % respectively. The average wind speed range was 2.0 – 4.7 km/hr.	It is likely to have light to moderate rains during next five days. The sky is likely to be partly cloudy to mainly cloudy with maximum temp. of 30.0 - 35.0 °C and minimum temp. of 19.0 – 21.0 °C. The maximum RH is likely to attain a max value of 98 % and minimum RH of 60 %. The average wind speed during next five days may reach upto max. value of 3 km/hr.

Main Weather Observation

Low/ medium and convective clouds are seen over northeastern states

Weather Forecast for next 3 days (upto 0830 hours IST of 3rd May, 2013)

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

Weather warning during next 3 days

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

Weather Outlook for subsequent 4 days from 3rd to 7th 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			
Rice	(Pre-kharif) Vegetative		- 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
	Kharif		Field may be ploughed.
Maize	Sowing		- Sowing may be done by maintaining a spacing of 60cm x 30cm. - Top dressing may be done when the plants is knee high.
	Silking stage		- Weeding may be done.
Groundnut & soybean	Land preparation to sowing		- Sowing may be done in prepared field.
Blackgram & Rice bean	Land preparation		Land preparation may be started for sowing. It should be made weed free before sowing.
Storage			- 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		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	- Use Methyl Euginol @ 4-5 drops/ 150-200 ml of water as trap against Red Pumpkin Beetle.
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.



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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 comes.
Orange	Grown-up trees		In orange, 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 FMD	- Vaccinate with Swine Fever vaccine as per prescribed dose but de-worm using Panacur tab @ 1.5mg/10kg body weight before vaccination. Don't use Korean strain vaccine. - 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 B.Q. and H.S. 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 Ranikhet disease but deworm before vaccination.
		Coccidiosis	- Poultry must be provided Cocciostat/ Supercox (@ 1g/lit of drinking water) + plus 150gm of Glucose and vit K for 5 to 7 days.
		Management	- Provide clean & safe drinking water by adding Sokrena (scnitizer) to avoid Colebacilliosis . 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. 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. 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	- Stocked 20-30 lakhs spawns 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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Scientist i/c, IAAS



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MANIPUR BULLETIN

30th 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 1st to 5th May, 2013 as given below:

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Main Weather Observation

Low/ medium and convective clouds are seen over northeastern states

Weather Forecast for next 3 days (upto 0830 hours IST of 3rd May, 2013)

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

Weather warning during next 3 days

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

Weather Outlook for subsequent 4 days from 3rd to 7th 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			
Rice	(Pre-kharif) Vegetative		- 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
	Kharif		Field may be ploughed.
Maize	Sowing		- Sowing may be done by maintaining a spacing of 60cm x 30cm. - Top dressing may be done when the plants is knee high.
	Silking stage		- Weeding may be done.
Groundnut & soybean	Land preparation to sowing		- Sowing may be done in prepared field.
Blackgram & Rice bean	Land preparation		Land preparation may be started for sowing. It should be made weed free before sowing.
Storage			- 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		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	- Use Methyl Euginol @ 4-5 drops/ 150-200 ml of water as trap against Red Pumpkin Beetle.
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.



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



“Integrated Agromet Advisory Services”

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 comes.
Orange	Grown-up trees		In orange, 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 FMD	- 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. - 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.
		Management	- Provide clean & safe drinking water by adding Sokrena (scnitizer) to avoid <i>Colebacilliosis</i> . 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. 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. 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	- Stocked 20-30 lakhs spawns 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



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



“Integrated Agromet Advisory Services”

MANIPUR BULLETIN

30th 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 1st to 5th 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 four days the sky was partly cloudy to mainly cloudy. 3.9 mm rainfall was recorded during past four days. Maximum temperature range observed was 27.5 – 31.1 °C, range of minimum temperature observed was 14.0 – 18.0 °C, mean relative humidity observed in morning and afternoon were 87.5 % and 54.25 % respectively. The average wind speed range was 2.0 – 4.7 km/hr.</p>	<p><u>Weather forecast for next five days of Ukhrul (27th April to 1st May, 2013)</u></p> <p>It is likely to have light to moderate rains during next five days. The sky is likely to be partly cloudy to mainly cloudy with maximum temp. of 27.0 - 30.0 °C and minimum temp. of 13.0 – 19.0 °C. The maximum RH is likely to attain a max value of 96 % and minimum RH of 55 %. The average wind speed during next five days may reach upto max. value of 3 km/hr.</p>
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Main Weather Observation

Low/ medium and convective clouds are seen over northeastern states

Weather Forecast for next 3 days (upto 0830 hours IST of 3rd May, 2013)

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

Weather warning during next 3 days

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

Weather Outlook for subsequent 4 days from 3rd to 7th 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			
Rice	(Pre-kharif) Vegetative		- 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
	Kharif		Field may be ploughed.
Maize	Sowing		- Sowing may be done by maintaining a spacing of 60cm x 30cm. - Top dressing may be done when the plants is knee high.
	Silking stage		- Weeding may be done.
Soybean	Land preparation to sowing		- Sowing may be done in prepared field.
Blackgram & Rice bean	Land preparation		Land preparation may be started for sowing. It should be made weed free before sowing.
Storage			- 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		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	- Use Methyl Euginol @ 4-5 drops/ 150-200 ml of water as trap against Red Pumpkin Beetle.
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.



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



“Integrated Agromet Advisory Services”

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 comes.
Orange	Grown-up trees		In orange, 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 FMD	- 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. - 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.
		Management	- Provide clean & safe drinking water by adding Sokrena (scnitizer) to avoid <i>Colebacilliosis</i> . 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. 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. 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	- Stocked 20-30 lakhs spawns 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



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



“Integrated Agromet Advisory Services”

MANIPUR BULLETIN

30th 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 1st to 5th 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 four days the sky was partly cloudy to mainly cloudy. 3.9 mm rainfall was recorded during past four days. Maximum temperature range observed was 27.5 – 31.1 °C, range of minimum temperature observed was 14.0 – 18.0 °C, mean relative humidity observed in morning and afternoon were 87.5 % and 54.25 % respectively. The average wind speed range was 2.0 – 4.7 km/hr.</p>	<p><u>Weather forecast for next five days of Bishnupur (27th April to 1st May, 2013)</u></p> <p>It is likely to have light to moderate rains during next five days. The sky is likely to be partly cloudy to mainly cloudy with maximum temp. of 30.0 - 33.0 °C and minimum temp. of 18.0 – 21.0 °C. The maximum RH is likely to attain a max value of 97 % and minimum RH of 62 %. The average wind speed during next five days may reach upto max. value of 4 km/hr.</p>
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Main Weather Observation

Low/ medium and convective clouds are seen over northeastern states

Weather Forecast for next 3 days (upto 0830 hours IST of 3rd May, 2013)

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

Weather warning during next 3 days

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

Weather Outlook for subsequent 4 days from 3rd to 7th 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			
Rice	(Pre-kharif) Vegetative		- 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
	Kharif		Field may be ploughed.
Maize	Sowing		- Sowing may be done by maintaining a spacing of 60cm x 30cm. - Top dressing may be done when the plants is knee high.
	Silking stage		- Weeding may be done.
Groundnut & soybean	Land preparation to sowing		- Sowing may be done in prepared field.
Blackgram & Rice bean	Land preparation		Land preparation may be started for sowing. It should be made weed free before sowing.
Storage			- 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		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	- Use Methyl Euginol @ 4-5 drops/ 150-200 ml of water as trap against Red Pumpkin Beetle.
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.



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



“Integrated Agromet Advisory Services”

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 comes.
Orange	Grown-up trees		In orange, 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 FMD	- 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. - 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.
		Management	- Provide clean & safe drinking water by adding Sokrena (scnitizer) to avoid <i>Colebacilliosis</i> . 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. 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. 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	- Stocked 20-30 lakhs spawns 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



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



“Integrated Agromet Advisory Services”

MANIPUR BULLETIN

30th 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 1st to 5th 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 four days the sky was partly cloudy to mainly cloudy. 3.9 mm rainfall was recorded during past four days. Maximum temperature range observed was 27.5 – 31.1 °C, range of minimum temperature observed was 14.0 – 18.0 °C, mean relative humidity observed in morning and afternoon were 87.5 % and 54.25 % respectively. The average wind speed range was 2.0 – 4.7 km/hr.</p>	<p><u>Weather forecast for next five days of Chandel (27th April to 1st May, 2013)</u></p> <p>It is likely to have light to moderate rains during next five days. The sky is likely to be partly cloudy to mainly cloudy with maximum temp. of 30.0 - 35.0 °C and minimum temp. of 19.0 – 24.0 °C. The maximum RH is likely to attain a max value of 95 % and minimum RH of 56 %. The average wind speed during next five days may reach upto max. value of 4 km/hr.</p>
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Main Weather Observation

Low/ medium and convective clouds are seen over northeastern states

Weather Forecast for next 3 days (upto 0830 hours IST of 3rd May, 2013)

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

Weather warning during next 3 days

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

Weather Outlook for subsequent 4 days from 3rd to 7th 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			
Rice	(Pre-kharif) Vegetative		- 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
	Kharif		Field may be ploughed.
Maize	Sowing		- Sowing may be done by maintaining a spacing of 60cm x 30cm. - Top dressing may be done when the plants is knee high.
	Silking stage		- Weeding may be done.
Groundnut & soybean	Land preparation to sowing		- Sowing may be done in prepared field.
Blackgram & Rice bean	Land preparation		Land preparation may be started for sowing. It should be made weed free before sowing.
Storage			- 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		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	- Use Methyl Euginol @ 4-5 drops/ 150-200 ml of water as trap against Red Pumpkin Beetle.
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.



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



“Integrated Agromet Advisory Services”

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 comes.
Orange	Grown-up trees		In orange, 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 FMD	- 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. - 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.
		Management	- Provide clean & safe drinking water by adding Sokrena (scnitizer) to avoid <i>Colebacilliosis</i> . 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. 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. 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	- Stocked 20-30 lakhs spawns 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



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



“Integrated Agromet Advisory Services”

MANIPUR BULLETIN

30th 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 1st to 5th 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 Tamenglong (27th April to 1st May, 2013)</u>
During the past four days the sky was partly cloudy to mainly cloudy. 3.9 mm rainfall was recorded during past four days. Maximum temperature range observed was 27.5 – 31.1 °C, range of minimum temperature observed was 14.0 – 18.0 °C, mean relative humidity observed in morning and afternoon were 87.5 % and 54.25 % respectively. The average wind speed range was 2.0 – 4.7 km/hr.	It is likely to have light to moderate rains during next five days. The sky is likely to be partly cloudy to mainly cloudy with maximum temp. of 29.0 - 34.0 °C and minimum temp. of 19.0 – 21.0 °C. The maximum RH is likely to attain a max value of 97 % and minimum RH of 50 %. The average wind speed during next five days may reach upto max. value of 5 km/hr.

Main Weather Observation

Low/ medium and convective clouds are seen over northeastern states

Weather Forecast for next 3 days (upto 0830 hours IST of 3rd May, 2013)

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

Weather warning during next 3 days

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

Weather Outlook for subsequent 4 days from 3rd to 7th 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			
Rice	(Pre-kharif) Vegetative		- 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
	Kharif		Field may be ploughed.
Maize	Sowing		- Sowing may be done by maintaining a spacing of 60cm x 30cm. - Top dressing may be done when the plants is knee high.
	Silking stage		- Weeding may be done.
Groundnut & soybean	Land preparation to sowing		- Sowing may be done in prepared field.
Blackgram & Rice bean	Land preparation		Land preparation may be started for sowing. It should be made weed free before sowing.
Storage			- 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		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	- Use Methyl Euginol @ 4-5 drops/ 150-200 ml of water as trap against Red Pumpkin Beetle.
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.



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

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 comes.
Orange	Grown-up trees		In orange, 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 FMD	- Vaccinate with Swine Fever vaccine as per prescribed dose but de-worm using Panacur tab @ 1.5mg/10kg body weight before vaccination. Don't use Korean strain vaccine. - 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 B.Q. and H.S. 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 Ranikhet disease but deworm before vaccination.
		Coccidiosis	- Poultry must be provided Cocciostat/ Supercox (@ 1g/lit of drinking water) + plus 150gm of Glucose and vit K for 5 to 7 days.
		Management	- Provide clean & safe drinking water by adding Sokrena (scnitizer) to avoid Colebacilliosis . 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. 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. 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	- Stocked 20-30 lakhs spawns 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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