



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



“Integrated Agromet Advisory Services”

MANIPUR BULLETIN

15th April, 2014

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 16th to 20th April, 14 as given below:

Significant past weather for the preceding bi-weekly of Imphal - West (11th to 14th April, 2014)

The sky was partly cloudy to cloudy but mainly clear during afternoon hours of 11th and on 14th April. No rainfall was recorded during past four days. Maximum temperature range observed was 29.6 – 31.9 °C, range of minimum temperature observed was 9.9 – 16.2 °C, mean relative humidity observed in morning and afternoon were 82.25 % and 61.25 % respectively. The average wind speed range was 3.9 – 5.4 km/hr.

Weather forecast for next five days of Churachandpur (16th to 20th April, 2014)

It is likely to have light rain on Friday. Sky may be mainly clear to partly cloudy with maximum temp. of 30.0 – 33.0 °C & minimum temp. 14.0 - 17.0 °C. Relative Humidity may reach a maximum of 92 % (maximum RH) & 24 % (minimum RH). The average wind speed may be 3-6 km/hr during next five days.

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
Field Crops			
Early kharif rice	Vegetative		- Water depth of 5-8 cm may be maintained in the field after a week of transplanting. - One or two hand weeding may be done after 20-30 days of transplanting.
Rabi Maize	Vegetative to flowering		- Urea may be applied @ 66kg/ ha during inter-culture operation. - Thinning may be done. Maintain single plant per hill.
		Stem borer	- To control the infestation of stem borer, apply few granules of Carbofuran 3G at maize whorl.
Soybean/ Groundnut/ Blackgram	Land preparation		- Land preparation for sowing of soybean/ groundnut/ blackgram may be started. - Apply 10 – 13 t/ha or 2.5 – 3 t/sangam of FYM or compost by mixing thoroughly in the soil 1 - 2 weeks before sowing.
Storage			- Clean and store the seeds in RC-seed bins after proper drying. Check for germination of seeds or fungal growth. After proper drying, store grains/ seeds in well ventilated godowns. - Rodent management should be done in and around godowns.
Potato	Storage		To prevent Black Heart Disease in potatoes, it should not be stored and transit at high temperature (above 32 °C). The storage rooms should be well ventilated
Horticulture Crops			
Ginger & Turmeric	Land preparation		- Treat the seed rhizome with fungicide like Carbendazim @ 2gm/kg seed with dry or wet method. If wet method is applied then treated seed should be allowed to dry in shade before sowing.
	Sowing of ginger		Ginger pieces weighing 25-30 gm having 1 or 2 buds should be used as seed/ planting material and should be sown at 25cm x 25-30cm (25cm plant to plant and 25-30cm row to row).
	Sowing of turmeric		Turmeric pieces weighing 30-35 g having 1 or 2 buds must be used as seed and sown at 25cm X 40-45cm.
Onion	Harvesting		- Plants already more than 140 days old in varieties like Nasik and Preema, whose 70 % leaves is dry may be harvested. - Cut the leaves at the neck portion. Spread the onion in an airy shed for about a week.
Tomato	Flowering and fruiting	Mite	- To prevent small sucking insects in the lower surface of leaves, use Ethion 0.05% or Neem oil @2-3 ml / lit of water.
Cucurbits	Vegetative	Red Pumpkin Beetle	- Use Methyl Eugenol as trap @ 4-10 traps/ sangam. <i>Steps to prepare trap:</i>



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



“Integrated Agromet Advisory Services”

			<ul style="list-style-type: none"> - Cut the ½ litre empty mineral water bottle into two halves. - Mix 2-3 drops of Methyl Eugenol in 200ml of water in the lower half, cover the solution with the upper half of the bottle in inverted position so that a funnel like structure is made and beetles are lured.
Tree Bean	Harvesting		Collect disease free well mature fruit for seed purpose. After harvesting let it dry for 10-15 days before storage.

Animal Sciences

* Measures against mosquitoes breeding may be taken up. Also, use net to avoid entry of mosquitoes in the shed.

Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
Poultry	All susceptible age groups (as and when required)	Ranikhet disease	<ul style="list-style-type: none"> - Vaccinate again all the vaccinated flock using F-1/ Lasota strain vaccine through ocular route if the age of chick is less than 21 days and through nasal route if it is older than 21 days. - Vaccinate even in the face of Ranikhet disease outbreak with administration of antibiotic like Salbactam/ Ceftriazone, etc. - While giving vaccine, double dose of Lasota strain must be given @ 200 doses for 100 birds either in plain drinking water or along with Amulspray in drinking water @ 6g/ litre of water.
		Coccidiosis	- Add Amprolium Hydrochloride powder @ 2g/ litre of drinking water for 5-7 days. Give only medicated water during 5 days.
Sheep/ Goat	Above 3 months of age (as and when required)	Deworming B.Q.	<ul style="list-style-type: none"> - Minthal bolus @ ½ bolus for 20 kg body weight orally. - Vaccinate against B.Q.
Pig	Above 3 months of age (as and when required)	Swine Fever	- SFV (Swine Fever vaccine) @ 1ml sub- cutaneously inside thigh must be administered after the age of 3 months.
		FMD	- Vaccinate against FMD after the age of 3 months.
		Ectoparasites	- Add Butox @ 2ml in 1 lit of water and brush the animal using the solution, twice a week.
		Endoparasite	- Administer Albend liq. @ 15 ml orally once and repeat after 7 days.
Cattle / Buffalo/ Mithun	Above 3 months of age (as and when required)	B.Q.	<ul style="list-style-type: none"> - Vaccinate against Black Quarter. - Out-breaks of Black Quarter has been reported at Tangkham and Sinam village of Imphal-East district. Especially, vaccinate the animals in these areas after consulting doctor/ trained hand.
		Skin infection	- Add Butox @ 2ml in 1 lit of water and brush the animal using the solution, twice a week.

Fishery

Type of Farming	Stage	management	Agro-metrological advisories
Carp culture	nurseries	Pond and water	Ponds water should be clean and clear free from unwanted vegetation and insects and water depth should be maintained at 1.0-1.5m.
		Feed	Well balanced feeds should be provided 2-3 times a day @ 5-10% body weight/day
		Fish	20-30 million spawn can be stock in 1 ha pond.
	Grow -out	Pond and water	Regular manuring with a slurry of RCD @ 1500kg/ha at interval of 30 days should be done.
		Fish	8000-10,000 fingerlings can be stocked per ha. Sampling of fish for growth, diseases (if any) should be done by regular netting.
		Feed	Well balanced feed should be provided @ 3-5% body weight per day in 2-3 splits.
Paddy cum fish culture	Field		Prepare trenches/channels in rice field of depth 1.0 - 1.5m can be start. 30-40% of the rice field can be converted into trenches/ditch/channels for paddy cum fish culture.

(I. Meghachandra Singh)
Scientist i/c, GKMS



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



“Integrated Agromet Advisory Services”

MANIPUR BULLETIN

15th April, 2014

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 16th to 20th April, 14 as given below:

Significant past weather for the preceding bi-weekly of Imphal - West (11th to 14th April, 2014)

The sky was partly cloudy to cloudy but mainly clear during afternoon hours of 11th and on 14th April. No rainfall was recorded during past four days. Maximum temperature range observed was 29.6 – 31.9 °C, range of minimum temperature observed was 9.9 – 16.2 °C, mean relative humidity observed in morning and afternoon were 82.25 % and 61.25 % respectively. The average wind speed range was 3.9 – 5.4 km/hr.

Weather forecast for next five days of Imphal - East (16th to 20th April, 2014)

It is likely to have light rain on Friday. Sky may be mainly clear to partly cloudy with maximum temp. of 30.0 – 33.0 °C & minimum temp. 15.0 - 18.0 °C. Relative Humidity may reach a maximum of 94 % (maximum RH) & 26 % (minimum RH). The average wind speed may be 2 km/hr during next five days.

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
Field Crops			
Early kharif rice	Vegetative		- Water depth of 5-8 cm may be maintained in the field after a week of transplanting. - One or two hand weeding may be done after 20-30 days of transplanting.
Rabi Maize	Vegetative to flowering		- Urea may be applied @ 66kg/ ha during inter-culture operation. - Thinning may be done. Maintain single plant per hill.
		Stem borer	- To control the infestation of stem borer, apply few granules of Carbofuran 3G at maize whorl.
Soybean/ Groundnut/ Blackgram	Land preparation		- Land preparation for sowing of soybean/ groundnut/ blackgram may be started. - Apply 10 – 13 t/ha or 2.5 – 3 t/sangam of FYM or compost by mixing thoroughly in the soil 1 - 2 weeks before sowing.
Storage			- Clean and store the seeds in RC-seed bins after proper drying. Check for germination of seeds or fungal growth. After proper drying, store grains/ seeds in well ventilated godowns. - Rodent management should be done in and around godowns.
Potato	Storage		To prevent Black Heart Disease in potatoes, it should not be stored and transit at high temperature (above 32 °C). The storage rooms should be well ventilated
Horticulture Crops			
Ginger & Turmeric	Land preparation		- Treat the seed rhizome with fungicide like Carbendazim @ 2gm/kg seed with dry or wet method. If wet method is applied then treated seed should be allowed to dry in shade before sowing.
	Sowing of ginger		Ginger pieces weighing 25-30 gm having 1 or 2 buds should be used as seed/ planting material and should be sown at 25cm x 25-30cm (25cm plant to plant and 25-30cm row to row).
	Sowing of turmeric		Turmeric pieces weighing 30-35 g having 1 or 2 buds must be used as seed and sown at 25cm X 40-45cm.
Onion	Harvesting		- Plants already more than 140 days old in varieties like Nasik and Preema, whose 70 % leaves is dry may be harvested. - Cut the leaves at the neck portion. Spread the onion in an airy shed for about a week.
Tomato	Flowering and fruiting	Mite	- To prevent small sucking insects in the lower surface of leaves, use Ethion 0.05% or Neem oil @2-3 ml / lit of water.
Cucurbits	Vegetative	Red Pumpkin Beetle	- Use Methyl Eugenol as trap @ 4-10 traps/ sangam. <i>Steps to prepare trap:</i>



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



“Integrated Agromet Advisory Services”

			<ul style="list-style-type: none"> - Cut the ½ litre empty mineral water bottle into two halves. - Mix 2-3 drops of Methyl Eugenol in 200ml of water in the lower half, cover the solution with the upper half of the bottle in inverted position so that a funnel like structure is made and beetles are lured.
Tree Bean	Harvesting		Collect disease free well mature fruit for seed purpose. After harvesting let it dry for 10-15 days before storage.

Animal Sciences

* Measures against mosquitoes breeding may be taken up. Also, use net to avoid entry of mosquitoes in the shed.

Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
Poultry	All susceptible age groups (as and when required)	Ranikhet disease	<ul style="list-style-type: none"> - Vaccinate again all the vaccinated flock using F-1/ Lasota strain vaccine through ocular route if the age of chick is less than 21 days and through nasal route if it is older than 21 days. - Vaccinate even in the face of Ranikhet disease outbreak with administration of antibiotic like Salbactum/ Ceftriazone, etc. - While giving vaccine, double dose of Lasota strain must be given @ 200 doses for 100 birds either in plain drinking water or along with Amulspray in drinking water @ 6g/ litre of water.
		Coccidiosis	- Add Amprolium Hydrochloride powder @ 2g/ litre of drinking water for 5-7 days. Give only medicated water during 5 days.
Sheep/ Goat	Above 3 months of age (as and when required)	Deworming B.Q.	<ul style="list-style-type: none"> - Minthal bolus @ ½ bolus for 20 kg body weight orally. - Vaccinate against B.Q.
Pig	Above 3 months of age (as and when required)	Swine Fever	- SFV (Swine Fever vaccine) @ 1ml sub- cutaneously inside thigh must be administered after the age of 3 months.
		FMD	- Vaccinate against FMD after the age of 3 months.
		Ectoparasites	- Add Butox @ 2ml in 1 lit of water and brush the animal using the solution, twice a week.
		Endoparasite	- Administer Albend liq. @ 15 ml orally once and repeat after 7 days.
Cattle / Buffalo/ Mithun	Above 3 months of age (as and when required)	B.Q.	<ul style="list-style-type: none"> - Vaccinate against Black Quarter. - Out-breaks of Black Quarter has been reported at Tangkham and Sinam village of Imphal-East district. Especially, vaccinate the animals in these areas after consulting doctor/ trained hand.
		Skin infection	- Add Butox @ 2ml in 1 lit of water and brush the animal using the solution, twice a week.

Fishery

Type of Farming	Stage	management	Agro-metrological advisories
Carp culture	nurseries	Pond and water	Ponds water should be clean and clear free from unwanted vegetation and insects and water depth should be maintained at 1.0-1.5m.
		Feed	Well balanced feeds should be provided 2-3 times a day @ 5-10% body weight/day
		Fish	20-30 million spawn can be stock in 1 ha pond.
	Grow -out	Pond and water	Regular manuring with a slurry of RCD @ 1500kg/ha at interval of 30 days should be done.
		Fish	8000-10,000 fingerlings can be stocked per ha. Sampling of fish for growth, diseases (if any) should be done by regular netting.
		Feed	Well balanced feed should be provided @ 3-5% body weight per day in 2-3 splits.
Paddy cum fish culture	Field		Prepare trenches/channels in rice field of depth 1.0 - 1.5m can be start. 30-40% of the rice field can be converted into trenches/ditch/channels for paddy cum fish culture.

(I. Meghachandra Singh)
 Scientist i/c, GKMS



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



“Integrated Agromet Advisory Services”

MANIPUR BULLETIN

15th April, 2014

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 16th to 20th April, 14 as given below:

Significant past weather for the preceding bi-weekly of Imphal - West (11th to 14th April, 2014)

The sky was partly cloudy to cloudy but mainly clear during afternoon hours of 11th and on 14th April. No rainfall was recorded during past four days. Maximum temperature range observed was 29.6 – 31.9 °C, range of minimum temperature observed was 9.9 – 16.2 °C, mean relative humidity observed in morning and afternoon were 82.25 % and 61.25 % respectively. The average wind speed range was 3.9 – 5.4 km/hr.

Weather forecast for next five days of Imphal - West (16th to 20th April, 2014)

It is likely to have light rain on Friday. Sky may be mainly clear to partly cloudy with maximum temp. of 31.0 – 33.0 °C & minimum temp. 14.0 - 16.0 °C. Relative Humidity may reach a maximum of 92 % (maximum RH) & 26 % (minimum RH). The average wind speed may be 2 km/hr during next five days.

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
Field Crops			
Early kharif rice	Vegetative		- Water depth of 5-8 cm may be maintained in the field after a week of transplanting. - One or two hand weeding may be done after 20-30 days of transplanting.
Rabi Maize	Vegetative to flowering		- Urea may be applied @ 66kg/ ha during inter-culture operation. - Thinning may be done. Maintain single plant per hill.
		Stem borer	- To control the infestation of stem borer, apply few granules of Carbofuran 3G at maize whorl.
Soybean/ Groundnut/ Blackgram	Land preparation		- Land preparation for sowing of soybean/ groundnut/ blackgram may be started. - Apply 10 – 13 t/ha or 2.5 – 3 t/sangam of FYM or compost by mixing thoroughly in the soil 1 - 2 weeks before sowing.
Storage			- Clean and store the seeds in RC-seed bins after proper drying. Check for germination of seeds or fungal growth. After proper drying, store grains/ seeds in well ventilated godowns. - Rodent management should be done in and around godowns.
Potato	Storage		To prevent Black Heart Disease in potatoes, it should not be stored and transit at high temperature (above 32 °C). The storage rooms should be well ventilated
Horticulture Crops			
Ginger & Turmeric	Land preparation		- Treat the seed rhizome with fungicide like Carbendazim @ 2gm/kg seed with dry or wet method. If wet method is applied then treated seed should be allowed to dry in shade before sowing.
	Sowing of ginger		Ginger pieces weighing 25-30 gm having 1 or 2 buds should be used as seed/ planting material and should be sown at 25cm x 25-30cm (25cm plant to plant and 25-30cm row to row).
	Sowing of turmeric		Turmeric pieces weighing 30-35 g having 1 or 2 buds must be used as seed and sown at 25cm X 40-45cm.
Onion	Harvesting		- Plants already more than 140 days old in varieties like Nasik and Preema, whose 70 % leaves is dry may be harvested. - Cut the leaves at the neck portion. Spread the onion in an airy shed for about a week.
Tomato	Flowering and fruiting	Mite	- To prevent small sucking insects in the lower surface of leaves, use Ethion 0.05% or Neem oil @2-3 ml / lit of water.
Cucurbits	Vegetative	Red Pumpkin Beetle	- Use Methyl Eugenol as trap @ 4-10 traps/ sangam. <i>Steps to prepare trap:</i>



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



“Integrated Agromet Advisory Services”

			<ul style="list-style-type: none"> - Cut the ½ litre empty mineral water bottle into two halves. - Mix 2-3 drops of Methyl Eugenol in 200ml of water in the lower half, cover the solution with the upper half of the bottle in inverted position so that a funnel like structure is made and beetles are lured.
Tree Bean	Harvesting		Collect disease free well mature fruit for seed purpose. After harvesting let it dry for 10-15 days before storage.

Animal Sciences

* Measures against mosquitoes breeding may be taken up. Also, use net to avoid entry of mosquitoes in the shed.

Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
Poultry	All susceptible age groups (as and when required)	Ranikhet disease	<ul style="list-style-type: none"> - Vaccinate again all the vaccinated flock using F-1/ Lasota strain vaccine through ocular route if the age of chick is less than 21 days and through nasal route if it is older than 21 days. - Vaccinate even in the face of Ranikhet disease outbreak with administration of antibiotic like Salbactum/ Ceftriazone, etc. - While giving vaccine, double dose of Lasota strain must be given @ 200 doses for 100 birds either in plain drinking water or along with Amulspray in drinking water @ 6g/ litre of water.
		Coccidiosis	- Add Amprolium Hydrochloride powder @ 2g/ litre of drinking water for 5-7 days. Give only medicated water during 5 days.
Sheep/ Goat	Above 3 months of age (as and when required)	Deworming B.Q.	<ul style="list-style-type: none"> - Minthal bolus @ ½ bolus for 20 kg body weight orally. - Vaccinate against B.Q.
Pig	Above 3 months of age (as and when required)	Swine Fever	- SFV (Swine Fever vaccine) @ 1ml sub- cutaneously inside thigh must be administered after the age of 3 months.
		FMD	- Vaccinate against FMD after the age of 3 months.
		Ectoparasites	- Add Butox @ 2ml in 1 lit of water and brush the animal using the solution, twice a week.
		Endoparasite	- Administer Albend liq. @ 15 ml orally once and repeat after 7 days.
Cattle / Buffalo/ Mithun	Above 3 months of age (as and when required)	B.Q.	<ul style="list-style-type: none"> - Vaccinate against Black Quarter. - Out-breaks of Black Quarter has been reported at Tangkham and Sinam village of Imphal-East district. Especially, vaccinate the animals in these areas after consulting doctor/ trained hand.
		Skin infection	- Add Butox @ 2ml in 1 lit of water and brush the animal using the solution, twice a week.

Fishery

Type of Farming	Stage	management	Agro-metrological advisories
Carp culture	nurseries	Pond and water	Ponds water should be clean and clear free from unwanted vegetation and insects and water depth should be maintained at 1.0-1.5m.
		Feed	Well balanced feeds should be provided 2-3 times a day @ 5-10% body weight/day
		Fish	20-30 million spawn can be stock in 1 ha pond.
	Grow -out	Pond and water	Regular manuring with a slurry of RCD @ 1500kg/ha at interval of 30 days should be done.
		Fish	8000-10,000 fingerlings can be stocked per ha. Sampling of fish for growth, diseases (if any) should be done by regular netting.
		Feed	Well balanced feed should be provided @ 3-5% body weight per day in 2-3 splits.
Paddy cum fish culture	Field		Prepare trenches/channels in rice field of depth 1.0 - 1.5m can be start. 30-40% of the rice field can be converted into trenches/ditch/channels for paddy cum fish culture.

(I. Meghachandra Singh)
Scientist i/c, GKMS



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



“Integrated Agromet Advisory Services”

MANIPUR BULLETIN

15th April, 2014

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 16th to 20th April, 14 as given below:

Significant past weather for the preceding bi-weekly of Imphal - West (11th to 14th April, 2014)

The sky was partly cloudy to cloudy but mainly clear during afternoon hours of 11th and on 14th April. No rainfall was recorded during past four days. Maximum temperature range observed was 29.6 – 31.9 °C, range of minimum temperature observed was 9.9 – 16.2 °C, mean relative humidity observed in morning and afternoon were 82.25 % and 61.25 % respectively. The average wind speed range was 3.9 – 5.4 km/hr.

Weather forecast for next five days of Senapati (16th to 20th April, 2014)

It is likely to have light rain on Friday. Sky may be mainly clear to partly cloudy with maximum temp. of 29.0 – 32.0 °C & minimum temp. 13.0 - 16.0 °C. Relative Humidity may reach a maximum of 87 % (maximum RH) & 26 % (minimum RH). The average wind speed may be 2 km/hr during next five days.

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
Field Crops			
Early kharif rice	Vegetative		- Water depth of 5-8 cm may be maintained in the field after a week of transplanting. - One or two hand weeding may be done after 20-30 days of transplanting.
Rabi Maize	Vegetative to flowering		- Urea may be applied @ 66kg/ ha during inter-culture operation. - Thinning may be done. Maintain single plant per hill.
		Stem borer	- To control the infestation of stem borer, apply few granules of Carbofuran 3G at maize whorl.
Soybean/ Groundnut/ Blackgram	Land preparation		- Land preparation for sowing of soybean/ groundnut/ blackgram may be started. - Apply 10 – 13 t/ha or 2.5 – 3 t/sangam of FYM or compost by mixing thoroughly in the soil 1 - 2 weeks before sowing.
Storage			- Clean and store the seeds in RC-seed bins after proper drying. Check for germination of seeds or fungal growth. After proper drying, store grains/ seeds in well ventilated godowns. - Rodent management should be done in and around godowns.
Potato	Storage		To prevent Black Heart Disease in potatoes, it should not be stored and transit at high temperature (above 32 °C). The storage rooms should be well ventilated
Horticulture Crops			
Ginger & Turmeric	Land preparation		- Treat the seed rhizome with fungicide like Carbendazim @ 2gm/kg seed with dry or wet method. If wet method is applied then treated seed should be allowed to dry in shade before sowing.
	Sowing of ginger		Ginger pieces weighing 25-30 gm having 1 or 2 buds should be used as seed/ planting material and should be sown at 25cm x 25-30cm (25cm plant to plant and 25-30cm row to row).
	Sowing of turmeric		Turmeric pieces weighing 30-35 g having 1 or 2 buds must be used as seed and sown at 25cm X 40-45cm.
Onion	Harvesting		- Plants already more than 140 days old in varieties like Nasik and Preema, whose 70 % leaves is dry may be harvested. - Cut the leaves at the neck portion. Spread the onion in an airy shed for about a week.
Tomato	Flowering and fruiting	Mite	- To prevent small sucking insects in the lower surface of leaves, use Ethion 0.05% or Neem oil @2-3 ml / lit of water.
Cucurbits	Vegetative	Red Pumpkin Beetle	- Use Methyl Eugenol as trap @ 4-10 traps/ sangam. <i>Steps to prepare trap:</i>



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



“Integrated Agromet Advisory Services”

			<ul style="list-style-type: none"> - Cut the ½ litre empty mineral water bottle into two halves. - Mix 2-3 drops of Methyl Eugenol in 200ml of water in the lower half, cover the solution with the upper half of the bottle in inverted position so that a funnel like structure is made and beetles are lured.
Tree Bean	Harvesting		Collect disease free well mature fruit for seed purpose. After harvesting let it dry for 10-15 days before storage.

Animal Sciences

* Measures against mosquitoes breeding may be taken up. Also, use net to avoid entry of mosquitoes in the shed.

Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
Poultry	All susceptible age groups (as and when required)	Ranikhet disease	<ul style="list-style-type: none"> - Vaccinate again all the vaccinated flock using F-1/ Lasota strain vaccine through ocular route if the age of chick is less than 21 days and through nasal route if it is older than 21 days. - Vaccinate even in the face of Ranikhet disease outbreak with administration of antibiotic like Salbactum/ Ceftriazone, etc. - While giving vaccine, double dose of Lasota strain must be given @ 200 doses for 100 birds either in plain drinking water or along with Amulspray in drinking water @ 6g/ litre of water.
		Coccidiosis	- Add Amprolium Hydrochloride powder @ 2g/ litre of drinking water for 5-7 days. Give only medicated water during 5 days.
Sheep/ Goat	Above 3 months of age (as and when required)	Deworming B.Q.	<ul style="list-style-type: none"> - Minthal bolus @ ½ bolus for 20 kg body weight orally. - Vaccinate against B.Q.
Pig	Above 3 months of age (as and when required)	Swine Fever	- SFV (Swine Fever vaccine) @ 1ml sub- cutaneously inside thigh must be administered after the age of 3 months.
		FMD	- Vaccinate against FMD after the age of 3 months.
		Ectoparasites	- Add Butox @ 2ml in 1 lit of water and brush the animal using the solution, twice a week.
		Endoparasite	- Administer Albend liq. @ 15 ml orally once and repeat after 7 days.
Cattle / Buffalo/ Mithun	Above 3 months of age (as and when required)	B.Q.	<ul style="list-style-type: none"> - Vaccinate against Black Quarter. - Out-breaks of Black Quarter has been reported at Tangkham and Sinam village of Imphal-East district. Especially, vaccinate the animals in these areas after consulting doctor/ trained hand.
		Skin infection	- Add Butox @ 2ml in 1 lit of water and brush the animal using the solution, twice a week.

Fishery

Type of Farming	Stage	management	Agro-metrological advisories
Carp culture	nurseries	Pond and water	Ponds water should be clean and clear free from unwanted vegetation and insects and water depth should be maintained at 1.0-1.5m.
		Feed	Well balanced feeds should be provided 2-3 times a day @ 5-10% body weight/day
		Fish	20-30 million spawn can be stock in 1 ha pond.
	Grow -out	Pond and water	Regular manuring with a slurry of RCD @ 1500kg/ha at interval of 30 days should be done.
		Fish	8000-10,000 fingerlings can be stocked per ha. Sampling of fish for growth, diseases (if any) should be done by regular netting.
		Feed	Well balanced feed should be provided @ 3-5% body weight per day in 2-3 splits.
Paddy cum fish culture	Field		Prepare trenches/channels in rice field of depth 1.0 - 1.5m can be start. 30-40% of the rice field can be converted into trenches/ditch/channels for paddy cum fish culture.

(I. Meghachandra Singh)
Scientist i/c, GKMS



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



“Integrated Agromet Advisory Services”

MANIPUR BULLETIN

15th April, 2014

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 16th to 20th April, 14 as given below:

Significant past weather for the preceding bi-weekly of Imphal - West (11th to 14th April, 2014)

The sky was partly cloudy to cloudy but mainly clear during afternoon hours of 11th and on 14th April. No rainfall was recorded during past four days. Maximum temperature range observed was 29.6 – 31.9 °C, range of minimum temperature observed was 9.9 – 16.2 °C, mean relative humidity observed in morning and afternoon were 82.25 % and 61.25 % respectively. The average wind speed range was 3.9 – 5.4 km/hr.

Weather forecast for next five days of Tamenglong (16th to 20th April, 2014)

It is likely to have light rain on Friday. Sky may be mainly clear to partly cloudy with maximum temp. of 32.0 – 34.0 °C & minimum temp. 15.0 - 18.0 °C. Relative Humidity may reach a maximum of 94 % (maximum RH) & 26 % (minimum RH). The average wind speed may be 2-3 km/hr during next five days.

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
Field Crops			
Early kharif rice	Vegetative		- Water depth of 5-8 cm may be maintained in the field after a week of transplanting. - One or two hand weeding may be done after 20-30 days of transplanting.
Rabi Maize	Vegetative to flowering		- Urea may be applied @ 66kg/ ha during inter-culture operation. - Thinning may be done. Maintain single plant per hill.
		Stem borer	- To control the infestation of stem borer, apply few granules of Carbofuran 3G at maize whorl.
Soybean/ Groundnut/ Blackgram	Land preparation		- Land preparation for sowing of soybean/ groundnut/ blackgram may be started. - Apply 10 – 13 t/ha or 2.5 – 3 t/sangam of FYM or compost by mixing thoroughly in the soil 1 - 2 weeks before sowing.
Storage			- Clean and store the seeds in RC-seed bins after proper drying. Check for germination of seeds or fungal growth. After proper drying, store grains/ seeds in well ventilated godowns. - Rodent management should be done in and around godowns.
Potato	Storage		To prevent Black Heart Disease in potatoes, it should not be stored and transit at high temperature (above 32 °C). The storage rooms should be well ventilated
Horticulture Crops			
Ginger & Turmeric	Land preparation		- Treat the seed rhizome with fungicide like Carbendazim @ 2gm/kg seed with dry or wet method. If wet method is applied then treated seed should be allowed to dry in shade before sowing.
	Sowing of ginger		Ginger pieces weighing 25-30 gm having 1 or 2 buds should be used as seed/ planting material and should be sown at 25cm x 25-30cm (25cm plant to plant and 25-30cm row to row).
	Sowing of turmeric		Turmeric pieces weighing 30-35 g having 1 or 2 buds must be used as seed and sown at 25cm X 40-45cm.
Onion	Harvesting		- Plants already more than 140 days old in varieties like Nasik and Preema, whose 70 % leaves is dry may be harvested. - Cut the leaves at the neck portion. Spread the onion in an airy shed for about a week.
Tomato	Flowering and fruiting	Mite	- To prevent small sucking insects in the lower surface of leaves, use Ethion 0.05% or Neem oil @2-3 ml / lit of water.
Cucurbits	Vegetative	Red Pumpkin Beetle	- Use Methyl Eugenol as trap @ 4-10 traps/ sangam. <i>Steps to prepare trap:</i>



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



“Integrated Agromet Advisory Services”

			<ul style="list-style-type: none"> - Cut the ½ litre empty mineral water bottle into two halves. - Mix 2-3 drops of Methyl Eugenol in 200ml of water in the lower half, cover the solution with the upper half of the bottle in inverted position so that a funnel like structure is made and beetles are lured.
Tree Bean	Harvesting		Collect disease free well mature fruit for seed purpose. After harvesting let it dry for 10-15 days before storage.

Animal Sciences

* Measures against mosquitoes breeding may be taken up. Also, use net to avoid entry of mosquitoes in the shed.

Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
Poultry	All susceptible age groups (as and when required)	Ranikhet disease	<ul style="list-style-type: none"> - Vaccinate again all the vaccinated flock using F-1/ Lasota strain vaccine through ocular route if the age of chick is less than 21 days and through nasal route if it is older than 21 days. - Vaccinate even in the face of Ranikhet disease outbreak with administration of antibiotic like Salbactam/ Ceftriazone, etc. - While giving vaccine, double dose of Lasota strain must be given @ 200 doses for 100 birds either in plain drinking water or along with Amulspray in drinking water @ 6g/ litre of water.
		Coccidiosis	- Add Amprolium Hydrochloride powder @ 2g/ litre of drinking water for 5-7 days. Give only medicated water during 5 days.
Sheep/ Goat	Above 3 months of age (as and when required)	Deworming B.Q.	<ul style="list-style-type: none"> - Minthal bolus @ ½ bolus for 20 kg body weight orally. - Vaccinate against B.Q.
Pig	Above 3 months of age (as and when required)	Swine Fever	- SFV (Swine Fever vaccine) @ 1ml sub- cutaneously inside thigh must be administered after the age of 3 months.
		FMD	- Vaccinate against FMD after the age of 3 months.
		Ectoparasites	- Add Butox @ 2ml in 1 lit of water and brush the animal using the solution, twice a week.
		Endoparasite	- Administer Albend liq. @ 15 ml orally once and repeat after 7 days.
Cattle / Buffalo/ Mithun	Above 3 months of age (as and when required)	B.Q.	<ul style="list-style-type: none"> - Vaccinate against Black Quarter. - Out-breaks of Black Quarter has been reported at Tangkham and Sinam village of Imphal-East district. Especially, vaccinate the animals in these areas after consulting doctor/ trained hand.
		Skin infection	- Add Butox @ 2ml in 1 lit of water and brush the animal using the solution, twice a week.

Fishery

Type of Farming	Stage	management	Agro-metrological advisories
Carp culture	nurseries	Pond and water	Ponds water should be clean and clear free from unwanted vegetation and insects and water depth should be maintained at 1.0-1.5m.
		Feed	Well balanced feeds should be provided 2-3 times a day @ 5-10% body weight/day
		Fish	20-30 million spawn can be stock in 1 ha pond.
	Grow -out	Pond and water	Regular manuring with a slurry of RCD @ 1500kg/ha at interval of 30 days should be done.
		Fish	8000-10,000 fingerlings can be stocked per ha. Sampling of fish for growth, diseases (if any) should be done by regular netting.
		Feed	Well balanced feed should be provided @ 3-5% body weight per day in 2-3 splits.
Paddy cum fish culture	Field		Prepare trenches/channels in rice field of depth 1.0 - 1.5m can be start. 30-40% of the rice field can be converted into trenches/ditch/channels for paddy cum fish culture.

(I. Meghachandra Singh)
Scientist i/c, GKMS



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



“Integrated Agromet Advisory Services”

MANIPUR BULLETIN

15th April, 2014

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 16th to 20th April, 14 as given below:

Significant past weather for the preceding bi-weekly of Imphal - West (11th to 14th April, 2014)

The sky was partly cloudy to cloudy but mainly clear during afternoon hours of 11th and on 14th April. No rainfall was recorded during past four days. Maximum temperature range observed was 29.6 – 31.9 °C, range of minimum temperature observed was 9.9 – 16.2 °C, mean relative humidity observed in morning and afternoon were 82.25 % and 61.25 % respectively. The average wind speed range was 3.9 – 5.4 km/hr.

Weather forecast for next five days of Thoubal (16th to 20th April, 2014)

It is likely to have light rain on Friday. Sky may be mainly clear to partly cloudy with maximum temp. of 30.0 – 33.0 °C & minimum temp. 15.0 - 18.0 °C. Relative Humidity may reach a maximum of 88 % (maximum RH) & 26 % (minimum RH). The average wind speed may be 2-4 km/hr during next five days.

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
Field Crops			
Early kharif rice	Vegetative		- Water depth of 5-8 cm may be maintained in the field after a week of transplanting. - One or two hand weeding may be done after 20-30 days of transplanting.
Rabi Maize	Vegetative to flowering		- Urea may be applied @ 66kg/ ha during inter-culture operation. - Thinning may be done. Maintain single plant per hill.
		Stem borer	- To control the infestation of stem borer, apply few granules of Carbofuran 3G at maize whorl.
Soybean/ Groundnut/ Blackgram	Land preparation		- Land preparation for sowing of soybean/ groundnut/ blackgram may be started. - Apply 10 – 13 t/ha or 2.5 – 3 t/sangam of FYM or compost by mixing thoroughly in the soil 1 - 2 weeks before sowing.
Storage			- Clean and store the seeds in RC-seed bins after proper drying. Check for germination of seeds or fungal growth. After proper drying, store grains/ seeds in well ventilated godowns. - Rodent management should be done in and around godowns.
Potato	Storage		To prevent Black Heart Disease in potatoes, it should not be stored and transit at high temperature (above 32 °C). The storage rooms should be well ventilated
Horticulture Crops			
Ginger & Turmeric	Land preparation		- Treat the seed rhizome with fungicide like Carbendazim @ 2gm/kg seed with dry or wet method. If wet method is applied then treated seed should be allowed to dry in shade before sowing.
	Sowing of ginger		Ginger pieces weighing 25-30 gm having 1 or 2 buds should be used as seed/ planting material and should be sown at 25cm x 25-30cm (25cm plant to plant and 25-30cm row to row).
	Sowing of turmeric		Turmeric pieces weighing 30-35 g having 1 or 2 buds must be used as seed and sown at 25cm X 40-45cm.
Onion	Harvesting		- Plants already more than 140 days old in varieties like Nasik and Preema, whose 70 % leaves is dry may be harvested. - Cut the leaves at the neck portion. Spread the onion in an airy shed for about a week.
Tomato	Flowering and fruiting	Mite	- To prevent small sucking insects in the lower surface of leaves, use Ethion 0.05% or Neem oil @2-3 ml / lit of water.
Cucurbits	Vegetative	Red Pumpkin Beetle	- Use Methyl Eugenol as trap @ 4-10 traps/ sangam. <i>Steps to prepare trap:</i>



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



“Integrated Agromet Advisory Services”

			<ul style="list-style-type: none"> - Cut the ½ litre empty mineral water bottle into two halves. - Mix 2-3 drops of Methyl Eugenol in 200ml of water in the lower half, cover the solution with the upper half of the bottle in inverted position so that a funnel like structure is made and beetles are lured.
Tree Bean	Harvesting		Collect disease free well mature fruit for seed purpose. After harvesting let it dry for 10-15 days before storage.

Animal Sciences

* Measures against mosquitoes breeding may be taken up. Also, use net to avoid entry of mosquitoes in the shed.

Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
Poultry	All susceptible age groups (as and when required)	Ranikhet disease	<ul style="list-style-type: none"> - Vaccinate again all the vaccinated flock using F-1/ Lasota strain vaccine through ocular route if the age of chick is less than 21 days and through nasal route if it is older than 21 days. - Vaccinate even in the face of Ranikhet disease outbreak with administration of antibiotic like Salbactam/ Ceftriazone, etc. - While giving vaccine, double dose of Lasota strain must be given @ 200 doses for 100 birds either in plain drinking water or along with Amulspray in drinking water @ 6g/ litre of water.
		Coccidiosis	- Add Amprolium Hydrochloride powder @ 2g/ litre of drinking water for 5-7 days. Give only medicated water during 5 days.
Sheep/ Goat	Above 3 months of age (as and when required)	Deworming B.Q.	<ul style="list-style-type: none"> - Minthal bolus @ ½ bolus for 20 kg body weight orally. - Vaccinate against B.Q.
Pig	Above 3 months of age (as and when required)	Swine Fever	- SFV (Swine Fever vaccine) @ 1ml sub- cutaneously inside thigh must be administered after the age of 3 months.
		FMD	- Vaccinate against FMD after the age of 3 months.
		Ectoparasites	- Add Butox @ 2ml in 1 lit of water and brush the animal using the solution, twice a week.
		Endoparasite	- Administer Albend liq. @ 15 ml orally once and repeat after 7 days.
Cattle / Buffalo/ Mithun	Above 3 months of age (as and when required)	B.Q.	<ul style="list-style-type: none"> - Vaccinate against Black Quarter. - Out-breaks of Black Quarter has been reported at Tangkham and Sinam village of Imphal-East district. Especially, vaccinate the animals in these areas after consulting doctor/ trained hand.
		Skin infection	- Add Butox @ 2ml in 1 lit of water and brush the animal using the solution, twice a week.

Fishery

Type of Farming	Stage	management	Agro-metrological advisories
Carp culture	nurseries	Pond and water	Ponds water should be clean and clear free from unwanted vegetation and insects and water depth should be maintained at 1.0-1.5m.
		Feed	Well balanced feeds should be provided 2-3 times a day @ 5-10% body weight/day
		Fish	20-30 million spawn can be stock in 1 ha pond.
	Grow -out	Pond and water	Regular manuring with a slurry of RCD @ 1500kg/ha at interval of 30 days should be done.
		Fish	8000-10,000 fingerlings can be stocked per ha. Sampling of fish for growth, diseases (if any) should be done by regular netting.
		Feed	Well balanced feed should be provided @ 3-5% body weight per day in 2-3 splits.
Paddy cum fish culture	Field		Prepare trenches/channels in rice field of depth 1.0 - 1.5m can be start. 30-40% of the rice field can be converted into trenches/ditch/channels for paddy cum fish culture.

(I. Meghachandra Singh)
Scientist i/c, GKMS



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



“Integrated Agromet Advisory Services”

MANIPUR BULLETIN

15th April, 2014

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 16th to 20th April, 14 as given below:

Significant past weather for the preceding bi-weekly of Imphal - West (11th to 14th April, 2014)

The sky was partly cloudy to cloudy but mainly clear during afternoon hours of 11th and on 14th April. No rainfall was recorded during past four days. Maximum temperature range observed was 29.6 – 31.9 °C, range of minimum temperature observed was 9.9 – 16.2 °C, mean relative humidity observed in morning and afternoon were 82.25 % and 61.25 % respectively. The average wind speed range was 3.9 – 5.4 km/hr.

Weather forecast for next five days of Ukhrul (16th to 20th April, 2014)

It is likely to have light rain on Friday. Sky may be mainly clear to partly cloudy with maximum temp. of 28.0 – 31.0 °C & minimum temp. 13.0 - 15.0 °C. Relative Humidity may reach a maximum of 75 % (maximum RH) & 24 % (minimum RH). The average wind speed may be 4 km/hr during next five days.

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
Field Crops			
Early kharif rice	Vegetative		- Water depth of 5-8 cm may be maintained in the field after a week of transplanting. - One or two hand weeding may be done after 20-30 days of transplanting.
Rabi Maize	Vegetative to flowering		- Urea may be applied @ 66kg/ ha during inter-culture operation. - Thinning may be done. Maintain single plant per hill.
		Stem borer	- To control the infestation of stem borer, apply few granules of Carbofuran 3G at maize whorl.
Soybean/ Groundnut/ Blackgram	Land preparation		- Land preparation for sowing of soybean/ groundnut/ blackgram may be started. - Apply 10 – 13 t/ha or 2.5 – 3 t/sangam of FYM or compost by mixing thoroughly in the soil 1 - 2 weeks before sowing.
Storage			- Clean and store the seeds in RC-seed bins after proper drying. Check for germination of seeds or fungal growth. After proper drying, store grains/ seeds in well ventilated godowns. - Rodent management should be done in and around godowns.
Potato	Storage		To prevent Black Heart Disease in potatoes, it should not be stored and transit at high temperature (above 32 °C). The storage rooms should be well ventilated
Horticulture Crops			
Ginger & Turmeric	Land preparation		- Treat the seed rhizome with fungicide like Carbendazim @ 2gm/kg seed with dry or wet method. If wet method is applied then treated seed should be allowed to dry in shade before sowing.
	Sowing of ginger		Ginger pieces weighing 25-30 gm having 1 or 2 buds should be used as seed/ planting material and should be sown at 25cm x 25-30cm (25cm plant to plant and 25-30cm row to row).
	Sowing of turmeric		Turmeric pieces weighing 30-35 g having 1 or 2 buds must be used as seed and sown at 25cm X 40-45cm.
Onion	Harvesting		- Plants already more than 140 days old in varieties like Nasik and Preema, whose 70 % leaves is dry may be harvested. - Cut the leaves at the neck portion. Spread the onion in an airy shed for about a week.
Tomato	Flowering and fruiting	Mite	- To prevent small sucking insects in the lower surface of leaves, use Ethion 0.05% or Neem oil @2-3 ml / lit of water.
Cucurbits	Vegetative	Red Pumpkin Beetle	- Use Methyl Eugenol as trap @ 4-10 traps/ sangam. <i>Steps to prepare trap:</i>



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



“Integrated Agromet Advisory Services”

			<ul style="list-style-type: none"> - Cut the ½ litre empty mineral water bottle into two halves. - Mix 2-3 drops of Methyl Eugenol in 200ml of water in the lower half, cover the solution with the upper half of the bottle in inverted position so that a funnel like structure is made and beetles are lured.
Tree Bean	Harvesting		Collect disease free well mature fruit for seed purpose. After harvesting let it dry for 10-15 days before storage.

Animal Sciences

* Measures against mosquitoes breeding may be taken up. Also, use net to avoid entry of mosquitoes in the shed.

Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
Poultry	All susceptible age groups (as and when required)	Ranikhet disease	<ul style="list-style-type: none"> - Vaccinate again all the vaccinated flock using F-1/ Lasota strain vaccine through ocular route if the age of chick is less than 21 days and through nasal route if it is older than 21 days. - Vaccinate even in the face of Ranikhet disease outbreak with administration of antibiotic like Salbactum/ Ceftriazone, etc. - While giving vaccine, double dose of Lasota strain must be given @ 200 doses for 100 birds either in plain drinking water or along with Amulspray in drinking water @ 6g/ litre of water.
		Coccidiosis	- Add Amprolium Hydrochloride powder @ 2g/ litre of drinking water for 5-7 days. Give only medicated water during 5 days.
Sheep/ Goat	Above 3 months of age (as and when required)	Deworming B.Q.	<ul style="list-style-type: none"> - Minthal bolus @ ½ bolus for 20 kg body weight orally. - Vaccinate against B.Q.
Pig	Above 3 months of age (as and when required)	Swine Fever	- SFV (Swine Fever vaccine) @ 1ml sub- cutaneously inside thigh must be administered after the age of 3 months.
		FMD	- Vaccinate against FMD after the age of 3 months.
		Ectoparasites	- Add Butox @ 2ml in 1 lit of water and brush the animal using the solution, twice a week.
		Endoparasite	- Administer Albend liq. @ 15 ml orally once and repeat after 7 days.
Cattle / Buffalo/ Mithun	Above 3 months of age (as and when required)	B.Q.	<ul style="list-style-type: none"> - Vaccinate against Black Quarter. - Out-breaks of Black Quarter has been reported at Tangkham and Sinam village of Imphal-East district. Especially, vaccinate the animals in these areas after consulting doctor/ trained hand.
		Skin infection	- Add Butox @ 2ml in 1 lit of water and brush the animal using the solution, twice a week.

Fishery

Type of Farming	Stage	management	Agro-metrological advisories
Carp culture	nurseries	Pond and water	Ponds water should be clean and clear free from unwanted vegetation and insects and water depth should be maintained at 1.0-1.5m.
		Feed	Well balanced feeds should be provided 2-3 times a day @ 5-10% body weight/day
		Fish	20-30 million spawn can be stock in 1 ha pond.
	Grow -out	Pond and water	Regular manuring with a slurry of RCD @ 1500kg/ha at interval of 30 days should be done.
		Fish	8000-10,000 fingerlings can be stocked per ha. Sampling of fish for growth, diseases (if any) should be done by regular netting.
		Feed	Well balanced feed should be provided @ 3-5% body weight per day in 2-3 splits.
Paddy cum fish culture	Field		Prepare trenches/channels in rice field of depth 1.0 - 1.5m can be start. 30-40% of the rice field can be converted into trenches/ditch/channels for paddy cum fish culture.

(I. Meghachandra Singh)
Scientist i/c, GKMS



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



“Integrated Agromet Advisory Services”

MANIPUR BULLETIN

15th April, 2014

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 16th to 20th April, 14 as given below:

Significant past weather for the preceding bi-weekly of Imphal - West (11th to 14th April, 2014)

The sky was partly cloudy to cloudy but mainly clear during afternoon hours of 11th and on 14th April. No rainfall was recorded during past four days. Maximum temperature range observed was 29.6 – 31.9 °C, range of minimum temperature observed was 9.9 – 16.2 °C, mean relative humidity observed in morning and afternoon were 82.25 % and 61.25 % respectively. The average wind speed range was 3.9 – 5.4 km/hr.

Weather forecast for next five days of Bishnupur (16th to 20th April, 2014)

It is likely to have light rain on Friday. Sky may be mainly clear to partly cloudy with maximum temp. of 31.0 – 34.0 °C & minimum temp. 16.0 - 18.0 °C. Relative Humidity may reach a maximum of 90 % (maximum RH) & 25 % (minimum RH). The average wind speed may be 2-4 km/hr during next five days.

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
Field Crops			
Early kharif rice	Vegetative		- Water depth of 5-8 cm may be maintained in the field after a week of transplanting. - One or two hand weeding may be done after 20-30 days of transplanting.
Rabi Maize	Vegetative to flowering		- Urea may be applied @ 66kg/ ha during inter-culture operation. - Thinning may be done. Maintain single plant per hill.
		Stem borer	- To control the infestation of stem borer, apply few granules of Carbofuran 3G at maize whorl.
Soybean/ Groundnut/ Blackgram	Land preparation		- Land preparation for sowing of soybean/ groundnut/ blackgram may be started. - Apply 10 – 13 t/ha or 2.5 – 3 t/sangam of FYM or compost by mixing thoroughly in the soil 1 - 2 weeks before sowing.
Storage			- Clean and store the seeds in RC-seed bins after proper drying. Check for germination of seeds or fungal growth. After proper drying, store grains/ seeds in well ventilated godowns. - Rodent management should be done in and around godowns.
Potato	Storage		To prevent Black Heart Disease in potatoes, it should not be stored and transit at high temperature (above 32 °C). The storage rooms should be well ventilated
Horticulture Crops			
Ginger & Turmeric	Land preparation		- Treat the seed rhizome with fungicide like Carbendazim @ 2gm/kg seed with dry or wet method. If wet method is applied then treated seed should be allowed to dry in shade before sowing.
	Sowing of ginger		Ginger pieces weighing 25-30 gm having 1 or 2 buds should be used as seed/ planting material and should be sown at 25cm x 25-30cm (25cm plant to plant and 25-30cm row to row).
	Sowing of turmeric		Turmeric pieces weighing 30-35 g having 1 or 2 buds must be used as seed and sown at 25cm X 40-45cm.
Onion	Harvesting		- Plants already more than 140 days old in varieties like Nasik and Preema, whose 70 % leaves is dry may be harvested. - Cut the leaves at the neck portion. Spread the onion in an airy shed for about a week.
Tomato	Flowering and fruiting	Mite	- To prevent small sucking insects in the lower surface of leaves, use Ethion 0.05% or Neem oil @2-3 ml / lit of water.
Cucurbits	Vegetative	Red Pumpkin Beetle	- Use Methyl Eugenol as trap @ 4-10 traps/ sangam. <i>Steps to prepare trap:</i>



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



“Integrated Agromet Advisory Services”

			<ul style="list-style-type: none"> - Cut the ½ litre empty mineral water bottle into two halves. - Mix 2-3 drops of Methyl Eugenol in 200ml of water in the lower half, cover the solution with the upper half of the bottle in inverted position so that a funnel like structure is made and beetles are lured.
Tree Bean	Harvesting		Collect disease free well mature fruit for seed purpose. After harvesting let it dry for 10-15 days before storage.

Animal Sciences

* Measures against mosquitoes breeding may be taken up. Also, use net to avoid entry of mosquitoes in the shed.

Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
Poultry	All susceptible age groups (as and when required)	Ranikhet disease	<ul style="list-style-type: none"> - Vaccinate again all the vaccinated flock using F-1/ Lasota strain vaccine through ocular route if the age of chick is less than 21 days and through nasal route if it is older than 21 days. - Vaccinate even in the face of Ranikhet disease outbreak with administration of antibiotic like Salbactam/ Ceftriazone, etc. - While giving vaccine, double dose of Lasota strain must be given @ 200 doses for 100 birds either in plain drinking water or along with Amulspray in drinking water @ 6g/ litre of water.
		Coccidiosis	- Add Amprolium Hydrochloride powder @ 2g/ litre of drinking water for 5-7 days. Give only medicated water during 5 days.
Sheep/ Goat	Above 3 months of age (as and when required)	Deworming B.Q.	<ul style="list-style-type: none"> - Minthal bolus @ ½ bolus for 20 kg body weight orally. - Vaccinate against B.Q.
Pig	Above 3 months of age (as and when required)	Swine Fever	- SFV (Swine Fever vaccine) @ 1ml sub- cutaneously inside thigh must be administered after the age of 3 months.
		FMD	- Vaccinate against FMD after the age of 3 months.
		Ectoparasites	- Add Butox @ 2ml in 1 lit of water and brush the animal using the solution, twice a week.
		Endoparasite	- Administer Albend liq. @ 15 ml orally once and repeat after 7 days.
Cattle / Buffalo/ Mithun	Above 3 months of age (as and when required)	B.Q.	<ul style="list-style-type: none"> - Vaccinate against Black Quarter. - Out-breaks of Black Quarter has been reported at Tangkham and Sinam village of Imphal-East district. Especially, vaccinate the animals in these areas after consulting doctor/ trained hand.
		Skin infection	- Add Butox @ 2ml in 1 lit of water and brush the animal using the solution, twice a week.

Fishery

Type of Farming	Stage	management	Agro-metrological advisories
Carp culture	nurseries	Pond and water	Ponds water should be clean and clear free from unwanted vegetation and insects and water depth should be maintained at 1.0-1.5m.
		Feed	Well balanced feeds should be provided 2-3 times a day @ 5-10% body weight/day
		Fish	20-30 million spawn can be stock in 1 ha pond.
	Grow -out	Pond and water	Regular manuring with a slurry of RCD @ 1500kg/ha at interval of 30 days should be done.
		Fish	8000-10,000 fingerlings can be stocked per ha. Sampling of fish for growth, diseases (if any) should be done by regular netting.
		Feed	Well balanced feed should be provided @ 3-5% body weight per day in 2-3 splits.
Paddy cum fish culture	Field		Prepare trenches/channels in rice field of depth 1.0 - 1.5m can be start. 30-40% of the rice field can be converted into trenches/ditch/channels for paddy cum fish culture.

(I. Meghachandra Singh)
Scientist i/c, GKMS



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



“Integrated Agromet Advisory Services”

MANIPUR BULLETIN

15th April, 2014

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 16th to 20th April, 14 as given below:

Significant past weather for the preceding bi-weekly of Imphal - West (11th to 14th April, 2014)

The sky was partly cloudy to cloudy but mainly clear during afternoon hours of 11th and on 14th April. No rainfall was recorded during past four days. Maximum temperature range observed was 29.6 – 31.9 °C, range of minimum temperature observed was 9.9 – 16.2 °C, mean relative humidity observed in morning and afternoon were 82.25 % and 61.25 % respectively. The average wind speed range was 3.9 – 5.4 km/hr.

Weather forecast for next five days of Chandel (16th to 20th April, 2014)

It is likely to have light rain on Friday. Sky may be mainly clear to partly cloudy with maximum temp. of 31.0 – 34.0 °C & minimum temp. 16.0 - 18.0 °C. Relative Humidity may reach a maximum of 77 % (maximum RH) & 23 % (minimum RH). The average wind speed may be 4-5 km/hr during next five days.

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
Field Crops			
Early kharif rice	Vegetative		- Water depth of 5-8 cm may be maintained in the field after a week of transplanting. - One or two hand weeding may be done after 20-30 days of transplanting.
Rabi Maize	Vegetative to flowering		- Urea may be applied @ 66kg/ ha during inter-culture operation. - Thinning may be done. Maintain single plant per hill.
		Stem borer	- To control the infestation of stem borer, apply few granules of Carbofuran 3G at maize whorl.
Soybean/ Groundnut/ Blackgram	Land preparation		- Land preparation for sowing of soybean/ groundnut/ blackgram may be started. - Apply 10 – 13 t/ha or 2.5 – 3 t/sangam of FYM or compost by mixing thoroughly in the soil 1 - 2 weeks before sowing.
Storage			- Clean and store the seeds in RC-seed bins after proper drying. Check for germination of seeds or fungal growth. After proper drying, store grains/ seeds in well ventilated godowns. - Rodent management should be done in and around godowns.
Potato	Storage		To prevent Black Heart Disease in potatoes, it should not be stored and transit at high temperature (above 32 °C). The storage rooms should be well ventilated
Horticulture Crops			
Ginger & Turmeric	Land preparation		- Treat the seed rhizome with fungicide like Carbendazim @ 2gm/kg seed with dry or wet method. If wet method is applied then treated seed should be allowed to dry in shade before sowing.
	Sowing of ginger		Ginger pieces weighing 25-30 gm having 1 or 2 buds should be used as seed/ planting material and should be sown at 25cm x 25-30cm (25cm plant to plant and 25-30cm row to row).
	Sowing of turmeric		Turmeric pieces weighing 30-35 g having 1 or 2 buds must be used as seed and sown at 25cm X 40-45cm.
Onion	Harvesting		- Plants already more than 140 days old in varieties like Nasik and Preema, whose 70 % leaves is dry may be harvested. - Cut the leaves at the neck portion. Spread the onion in an airy shed for about a week.
Tomato	Flowering and fruiting	Mite	- To prevent small sucking insects in the lower surface of leaves, use Ethion 0.05% or Neem oil @2-3 ml / lit of water.
Cucurbits	Vegetative	Red Pumpkin Beetle	- Use Methyl Eugenol as trap @ 4-10 traps/ sangam. <i>Steps to prepare trap:</i>



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



“Integrated Agromet Advisory Services”

			<ul style="list-style-type: none"> - Cut the ½ litre empty mineral water bottle into two halves. - Mix 2-3 drops of Methyl Eugenol in 200ml of water in the lower half, cover the solution with the upper half of the bottle in inverted position so that a funnel like structure is made and beetles are lured.
Tree Bean	Harvesting		Collect disease free well mature fruit for seed purpose. After harvesting let it dry for 10-15 days before storage.

Animal Sciences

* Measures against mosquitoes breeding may be taken up. Also, use net to avoid entry of mosquitoes in the shed.

Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
Poultry	All susceptible age groups (as and when required)	Ranikhet disease	<ul style="list-style-type: none"> - Vaccinate again all the vaccinated flock using F-1/ Lasota strain vaccine through ocular route if the age of chick is less than 21 days and through nasal route if it is older than 21 days. - Vaccinate even in the face of Ranikhet disease outbreak with administration of antibiotic like Salbactum/ Ceftriazone, etc. - While giving vaccine, double dose of Lasota strain must be given @ 200 doses for 100 birds either in plain drinking water or along with Amulspray in drinking water @ 6g/ litre of water.
		Coccidiosis	- Add Amprolium Hydrochloride powder @ 2g/ litre of drinking water for 5-7 days. Give only medicated water during 5 days.
Sheep/ Goat	Above 3 months of age (as and when required)	Deworming B.Q.	<ul style="list-style-type: none"> - Minthal bolus @ ½ bolus for 20 kg body weight orally. - Vaccinate against B.Q.
Pig	Above 3 months of age (as and when required)	Swine Fever	- SFV (Swine Fever vaccine) @ 1ml sub- cutaneously inside thigh must be administered after the age of 3 months.
		FMD	- Vaccinate against FMD after the age of 3 months.
		Ectoparasites	- Add Butox @ 2ml in 1 lit of water and brush the animal using the solution, twice a week.
		Endoparasite	- Administer Albend liq. @ 15 ml orally once and repeat after 7 days.
Cattle / Buffalo/ Mithun	Above 3 months of age (as and when required)	B.Q.	<ul style="list-style-type: none"> - Vaccinate against Black Quarter. - Out-breaks of Black Quarter has been reported at Tangkham and Sinam village of Imphal-East district. Especially, vaccinate the animals in these areas after consulting doctor/ trained hand.
		Skin infection	- Add Butox @ 2ml in 1 lit of water and brush the animal using the solution, twice a week.

Fishery

Type of Farming	Stage	management	Agro-metrological advisories
Carp culture	nurseries	Pond and water	Ponds water should be clean and clear free from unwanted vegetation and insects and water depth should be maintained at 1.0-1.5m.
		Feed	Well balanced feeds should be provided 2-3 times a day @ 5-10% body weight/day
		Fish	20-30 million spawn can be stock in 1 ha pond.
	Grow -out	Pond and water	Regular manuring with a slurry of RCD @ 1500kg/ha at interval of 30 days should be done.
		Fish	8000-10,000 fingerlings can be stocked per ha. Sampling of fish for growth, diseases (if any) should be done by regular netting.
		Feed	Well balanced feed should be provided @ 3-5% body weight per day in 2-3 splits.
Paddy cum fish culture	Field		Prepare trenches/channels in rice field of depth 1.0 - 1.5m can be start. 30-40% of the rice field can be converted into trenches/ditch/channels for paddy cum fish culture.

(I. Meghachandra Singh)
Scientist i/c, GKMS