



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



“Integrated Agromet Advisory Services”

MANIPUR BULLETIN

11th 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 12th to 16th April, 14 as given below:

Significant past weather for the preceding bi-weekly of Imphal - West (8th to 10th April, 2014)

The sky was partly cloudy to cloudy but mainly clear during afternoon hours of 8th and morning of 10th April. **9.6 mm** rainfall was recorded during past three days. Maximum temperature range observed was 27.4 – 29.2 °C, range of minimum temperature observed was 14.9 – 17.0 °C, mean relative humidity observed in morning and afternoon were 85.33 % and 59.67 % respectively. The average wind speed range was 4.1 – 7.7 km/hr.

Weather forecast for next five days of Imphal - East (12th to 16th April, 2014)

It is likely to have rain with thunderstorm upto wednesday. Sky may be mainly clear to partly cloudy with maximum temp. of 29.0 – 31.0 °C & minimum temp. 10.0 - 14.0 °C. Relative Humidity may reach a maximum of 75 % (maximum RH) & 28 % (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
* Harvest rain water. Drainage may be constructed well in and around the crop field.			
Field Crops			
Early kharif rice	Transplanting		<ul style="list-style-type: none"> - Row planting of 30-45 days old seedlings with 2-3 seedlings per hill may be done at a spacing of 25x10 cm using beaded rope. If seedlings are old, transplant 3-4 seedlings per hill. - Transplanting may be done upto mid of April. - To enhance the establishment of transplanted seedlings, water depth of 2-3cm may be maintained in the field after transplanting then it may be increased gradually upto 5-8 cm after a week.
		Plant hopper & case worm	<ul style="list-style-type: none"> - To prevent plant hopper & case worm, apply Carbofuran 3G @ 1kg/ sangam 7-10 days before uprooting.
Rabi Maize	Vegetative		<ul style="list-style-type: none"> - Urea may be applied @ 66kg/ ha during inter-culture operation. - Thinning may be done. Maintain single plant per hill.
		Stem borer	<ul style="list-style-type: none"> - To control the infestation of stem borer, apply few granules of Carbofuran 3G at maize whorl.
Soybean/ Groundnut/ Blackgram	Land preparation		<ul style="list-style-type: none"> - 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			<ul style="list-style-type: none"> - Clean and store the seeds in RC-seed bins after proper drying. Check for germination of seeds or fungal growth. After proper drying, store grains/ seeds in well ventilated godowns. - Rodent management should be done in and around godowns.
Horticulture Crops			
Cucurbits	Vegetative	Red Pumpkin Beetle	<ul style="list-style-type: none"> - Use Methyl Euginol as trap @ 4-10 traps/ sangam. <p><i>Steps to prepare trap:</i></p> <ul style="list-style-type: none"> - Cut the ½ litre mineral water bottle into two halves. - Mix 2-3 drops of Methyl Euginol 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 attracted.
Tomato	Flowering and fruiting to harvesting in polyhouse		<ul style="list-style-type: none"> - To prevent small sucking insects in the lower surface of leaves, use Ethion 0.05% or Neem oil @2-3 ml / lit of water.
Mango	Flowering	Fruit fly/ beetle	<ul style="list-style-type: none"> - Use Methyl Euginol as trap @ 4-10 traps/ sangam.



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Onion	Flower bud formation	Thrips/ leaf minor	- Spray Dichlorovos 76 EC @ 0.5ml/lit of water or Cypermethrin @ 2ml/lit of water to the crop during bulb formation stage.
Colocasia	Land preparation for planting		- Prepare land for planting colocasia.
Mandarin & Lemon	For grown up		- Khasi Mandarin apply 500g Urea, 1kg SSP & 400g MOP per plant along with 30 kg cowdung manure compost. - Kachai Lemon apply 350g Urea, 400g SSP & 300g MOP along with 30 kg cowdung manure compost per plant.

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	- 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	Minthal bolus @ ½ bolus for 20 kg body weight orally.
Pig	Above 3 months of age (as and when required)	Swine Fever & FMD	- Vaccinate against swine fever & 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.	- 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.
Cat fish (Ngakra)	Pond and water		Pond water may be replenished with fresh water maintaining a depth of 1m.
	Fish		Male and female brooder fishes may be segregated for breeding operations.
	Feed		Well balanced feed may be fed @ 3-5% body weight/day.

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



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“Integrated Agromet Advisory Services”

MANIPUR BULLETIN

11th 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 12th to 16th April, 14 as given below:

Significant past weather for the preceding bi-weekly of Imphal - West (8th to 10th April, 2014)

The sky was partly cloudy to cloudy but mainly clear during afternoon hours of 8th and morning of 10th April. **9.6 mm** rainfall was recorded during past three days. Maximum temperature range observed was 27.4 – 29.2 °C, range of minimum temperature observed was 14.9 – 17.0 °C, mean relative humidity observed in morning and afternoon were 85.33 % and 59.67 % respectively. The average wind speed range was 4.1 – 7.7 km/hr.

Weather forecast for next five days of Imphal - West (12th to 16th April, 2014)

It is likely to have rain with thunderstorm upto wednesday. Sky may be mainly clear to partly cloudy with maximum temp. of 29.0 – 32.0 °C & minimum temp. 12.0 - 15.0 °C. Relative Humidity may reach a maximum of 75 % (maximum RH) & 27 % (minimum RH). The average wind speed may be 2-5 km/hr during next five days.

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
* Harvest rain water. Drainage may be constructed well in and around the crop field.			
Field Crops			
Early kharif rice	Transplanting		<ul style="list-style-type: none"> - Row planting of 30-45 days old seedlings with 2-3 seedlings per hill may be done at a spacing of 25x10 cm using beaded rope. If seedlings are old, transplant 3-4 seedlings per hill. - Transplanting may be done upto mid of April. - To enhance the establishment of transplanted seedlings, water depth of 2-3cm may be maintained in the field after transplanting then it may be increased gradually upto 5-8 cm after a week.
		Plant hopper & case worm	<ul style="list-style-type: none"> - To prevent plant hopper & case worm, apply Carbofuran 3G @ 1kg/ sangam 7-10 days before uprooting.
Rabi Maize	Vegetative		<ul style="list-style-type: none"> - Urea may be applied @ 66kg/ ha during inter-culture operation. - Thinning may be done. Maintain single plant per hill.
		Stem borer	<ul style="list-style-type: none"> - To control the infestation of stem borer, apply few granules of Carbofuran 3G at maize whorl.
Soybean/ Groundnut/ Blackgram	Land preparation		<ul style="list-style-type: none"> - 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			<ul style="list-style-type: none"> - Clean and store the seeds in RC-seed bins after proper drying. Check for germination of seeds or fungal growth. After proper drying, store grains/ seeds in well ventilated godowns. - Rodent management should be done in and around godowns.
Horticulture Crops			
Cucurbits	Vegetative	Red Pumpkin Beetle	<ul style="list-style-type: none"> - Use Methyl Euginol as trap @ 4-10 traps/ sangam. <p><i>Steps to prepare trap:</i></p> <ul style="list-style-type: none"> - Cut the ½ litre mineral water bottle into two halves. - Mix 2-3 drops of Methyl Euginol 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 attracted.
Tomato	Flowering and fruiting to harvesting in polyhouse		<ul style="list-style-type: none"> - To prevent small sucking insects in the lower surface of leaves, use Ethion 0.05% or Neem oil @2-3 ml / lit of water.
Mango	Flowering	Fruit fly/ beetle	<ul style="list-style-type: none"> - Use Methyl Euginol as trap @ 4-10 traps/ sangam.



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Onion	Flower bud formation	Thrips/ leaf minor	- Spray Dichlorovos 76 EC @ 0.5ml/lit of water or Cypermethrin @ 2ml/lit of water to the crop during bulb formation stage.
Colocasia	Land preparation for planting		- Prepare land for planting colocasia.
Mandarin & Lemon	For grown up		- Khasi Mandarin apply 500g Urea, 1kg SSP & 400g MOP per plant along with 30 kg cowdung manure compost. - Kachai Lemon apply 350g Urea, 400g SSP & 300g MOP along with 30 kg cowdung manure compost per plant.

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	- 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	Minthal bolus @ ½ bolus for 20 kg body weight orally.
Pig	Above 3 months of age (as and when required)	Swine Fever & FMD	- Vaccinate against swine fever & 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.	- 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.
Cat fish (Ngakra)	Pond and water		Pond water may be replenished with fresh water maintaining a depth of 1m.
	Fish		Male and female brooder fishes may be segregated for breeding operations.
	Feed		Well balanced feed may be fed @ 3-5% body weight/day.

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MANIPUR BULLETIN

11th 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 12th to 16th April, 14 as given below:

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The sky was partly cloudy to cloudy but mainly clear during afternoon hours of 8th and morning of 10th April. **9.6 mm** rainfall was recorded during past three days. Maximum temperature range observed was 27.4 – 29.2 °C, range of minimum temperature observed was 14.9 – 17.0 °C, mean relative humidity observed in morning and afternoon were 85.33 % and 59.67 % respectively. The average wind speed range was 4.1 – 7.7 km/hr.

Weather forecast for next five days of Senapati (12th to 16th April, 2014)

It is likely to have no rain upto Wednesday. Sky may be mainly clear to partly cloudy with maximum temp. of 27.0 – 30.0 °C & minimum temp. 11.0 - 14.0 °C. Relative Humidity may reach a maximum of 74 % (maximum RH) & 27 % (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
* Harvest rain water. Drainage may be constructed well in and around the crop field.			
Field Crops			
Early kharif rice	Transplanting		<ul style="list-style-type: none"> - Row planting of 30-45 days old seedlings with 2-3 seedlings per hill may be done at a spacing of 25x10 cm using beaded rope. If seedlings are old, transplant 3-4 seedlings per hill. - Transplanting may be done upto mid of April. - To enhance the establishment of transplanted seedlings, water depth of 2-3cm may be maintained in the field after transplanting then it may be increased gradually upto 5-8 cm after a week.
		Plant hopper & case worm	<ul style="list-style-type: none"> - To prevent plant hopper & case worm, apply Carbofuran 3G @ 1kg/ sangam 7-10 days before uprooting.
Rabi Maize	Vegetative		<ul style="list-style-type: none"> - Urea may be applied @ 66kg/ ha during inter-culture operation. - Thinning may be done. Maintain single plant per hill.
		Stem borer	<ul style="list-style-type: none"> - To control the infestation of stem borer, apply few granules of Carbofuran 3G at maize whorl.
Soybean/ Groundnut/ Blackgram	Land preparation		<ul style="list-style-type: none"> - 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			<ul style="list-style-type: none"> - Clean and store the seeds in RC-seed bins after proper drying. Check for germination of seeds or fungal growth. After proper drying, store grains/ seeds in well ventilated godowns. - Rodent management should be done in and around godowns.
Horticulture Crops			
Cucurbits	Vegetative	Red Pumpkin Beetle	<ul style="list-style-type: none"> - Use Methyl Euginol as trap @ 4-10 traps/ sangam. <p><i>Steps to prepare trap:</i></p> <ul style="list-style-type: none"> - Cut the ½ litre mineral water bottle into two halves. - Mix 2-3 drops of Methyl Euginol 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 attracted.
Tomato	Flowering and fruiting to harvesting in polyhouse		<ul style="list-style-type: none"> - To prevent small sucking insects in the lower surface of leaves, use Ethion 0.05% or Neem oil @2-3 ml / lit of water.
Mango	Flowering	Fruit fly/ beetle	<ul style="list-style-type: none"> - Use Methyl Euginol as trap @ 4-10 traps/ sangam.



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Onion	Flower bud formation	Thrips/ leaf minor	- Spray Dichlorovos 76 EC @ 0.5ml/lit of water or Cypermethrin @ 2ml/lit of water to the crop during bulb formation stage.
Colocasia	Land preparation for planting		- Prepare land for planting colocasia.
Mandarin & Lemon	For grown up		- Khasi Mandarin apply 500g Urea, 1kg SSP & 400g MOP per plant along with 30 kg cowdung manure compost. - Kachai Lemon apply 350g Urea, 400g SSP & 300g MOP along with 30 kg cowdung manure compost per plant.

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	- 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	Minthal bolus @ ½ bolus for 20 kg body weight orally.
Pig	Above 3 months of age (as and when required)	Swine Fever & FMD	- Vaccinate against swine fever & 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.	- 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.
Cat fish (Ngakra)	Pond and water		Pond water may be replenished with fresh water maintaining a depth of 1m.
	Fish		Male and female brooder fishes may be segregated for breeding operations.
	Feed		Well balanced feed may be fed @ 3-5% body weight/day.

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MANIPUR BULLETIN

11th 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 12th to 16th April, 14 as given below:

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Weather forecast for next five days of Tamenglong (12th to 16th April, 2014)

It is likely to have no rain upto Wednesday. Sky may be mainly clear to partly cloudy with maximum temp. of 31.0 – 32.0 °C & minimum temp. 12.0 - 15.0 °C. Relative Humidity may reach a maximum of 74 % (maximum RH) & 25 % (minimum RH). The average wind speed may be 3 km/hr during next five days.

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
* Harvest rain water. Drainage may be constructed well in and around the crop field.			
Field Crops			
Early kharif rice	Transplanting		<ul style="list-style-type: none"> - Row planting of 30-45 days old seedlings with 2-3 seedlings per hill may be done at a spacing of 25x10 cm using beaded rope. If seedlings are old, transplant 3-4 seedlings per hill. - Transplanting may be done upto mid of April. - To enhance the establishment of transplanted seedlings, water depth of 2-3cm may be maintained in the field after transplanting then it may be increased gradually upto 5-8 cm after a week.
		Plant hopper & case worm	<ul style="list-style-type: none"> - To prevent plant hopper & case worm, apply Carbofuran 3G @ 1kg/ sangam 7-10 days before uprooting.
Rabi Maize	Vegetative		<ul style="list-style-type: none"> - Urea may be applied @ 66kg/ ha during inter-culture operation. - Thinning may be done. Maintain single plant per hill.
		Stem borer	<ul style="list-style-type: none"> - To control the infestation of stem borer, apply few granules of Carbofuran 3G at maize whorl.
Soybean/ Groundnut/ Blackgram	Land preparation		<ul style="list-style-type: none"> - 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			<ul style="list-style-type: none"> - Clean and store the seeds in RC-seed bins after proper drying. Check for germination of seeds or fungal growth. After proper drying, store grains/ seeds in well ventilated godowns. - Rodent management should be done in and around godowns.
Horticulture Crops			
Cucurbits	Vegetative	Red Pumpkin Beetle	<ul style="list-style-type: none"> - Use Methyl Euginol as trap @ 4-10 traps/ sangam. <p><i>Steps to prepare trap:</i></p> <ul style="list-style-type: none"> - Cut the ½ litre mineral water bottle into two halves. - Mix 2-3 drops of Methyl Euginol 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 attracted.
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Mango	Flowering	Fruit fly/ beetle	<ul style="list-style-type: none"> - Use Methyl Euginol as trap @ 4-10 traps/ sangam.



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Onion	Flower bud formation	Thrips/ leaf minor	- Spray Dichlorovos 76 EC @ 0.5ml/lit of water or Cypermethrin @ 2ml/lit of water to the crop during bulb formation stage.
Colocasia	Land preparation for planting		- Prepare land for planting colocasia.
Mandarin & Lemon	For grown up		- Khasi Mandarin apply 500g Urea, 1kg SSP & 400g MOP per plant along with 30 kg cowdung manure compost. - Kachai Lemon apply 350g Urea, 400g SSP & 300g MOP along with 30 kg cowdung manure compost per plant.

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	- 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	Minthal bolus @ ½ bolus for 20 kg body weight orally.
Pig	Above 3 months of age (as and when required)	Swine Fever & FMD	- Vaccinate against swine fever & 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.	- 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.
Cat fish (Ngakra)	Pond and water		Pond water may be replenished with fresh water maintaining a depth of 1m.
	Fish		Male and female brooder fishes may be segregated for breeding operations.
	Feed		Well balanced feed may be fed @ 3-5% body weight/day.

(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

11th 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 12th to 16th April, 14 as given below:

Significant past weather for the preceding bi-weekly of Imphal - West (8th to 10th April, 2014)

The sky was partly cloudy to cloudy but mainly clear during afternoon hours of 8th and morning of 10th April. **9.6 mm** rainfall was recorded during past three days. Maximum temperature range observed was 27.4 – 29.2 °C, range of minimum temperature observed was 14.9 – 17.0 °C, mean relative humidity observed in morning and afternoon were 85.33 % and 59.67 % respectively. The average wind speed range was 4.1 – 7.7 km/hr.

Weather forecast for next five days of Thoubal (12th to 16th April, 2014)

It is likely to have rain with thunderstorm upto Wednesday. Sky may be mainly clear to partly cloudy with maximum temp. of 31.0 – 34.0 °C & minimum temp. 14.0 – 15.0 °C. Relative Humidity may reach a maximum of 72 % (maximum RH) & 24 % (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
* Harvest rain water. Drainage may be constructed well in and around the crop field.			
Field Crops			
Early kharif rice	Transplanting		<ul style="list-style-type: none"> - Row planting of 30-45 days old seedlings with 2-3 seedlings per hill may be done at a spacing of 25x10 cm using beaded rope. If seedlings are old, transplant 3-4 seedlings per hill. - Transplanting may be done upto mid of April. - To enhance the establishment of transplanted seedlings, water depth of 2-3cm may be maintained in the field after transplanting then it may be increased gradually upto 5-8 cm after a week.
		Plant hopper & case worm	<ul style="list-style-type: none"> - To prevent plant hopper & case worm, apply Carbofuran 3G @ 1kg/ sangam 7-10 days before uprooting.
Rabi Maize	Vegetative		<ul style="list-style-type: none"> - Urea may be applied @ 66kg/ ha during inter-culture operation. - Thinning may be done. Maintain single plant per hill.
		Stem borer	<ul style="list-style-type: none"> - To control the infestation of stem borer, apply few granules of Carbofuran 3G at maize whorl.
Soybean/ Groundnut/ Blackgram	Land preparation		<ul style="list-style-type: none"> - 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			<ul style="list-style-type: none"> - Clean and store the seeds in RC-seed bins after proper drying. Check for germination of seeds or fungal growth. After proper drying, store grains/ seeds in well ventilated godowns. - Rodent management should be done in and around godowns.
Horticulture Crops			
Cucurbits	Vegetative	Red Pumpkin Beetle	<ul style="list-style-type: none"> - Use Methyl Eugenol as trap @ 4-10 traps/ sangam. <p><i>Steps to prepare trap:</i></p> <ul style="list-style-type: none"> - Cut the ½ litre 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 attracted.
Tomato	Flowering and fruiting to harvesting in polyhouse		<ul style="list-style-type: none"> - To prevent small sucking insects in the lower surface of leaves, use Ethion 0.05% or Neem oil @2-3 ml / lit of water.
Mango	Flowering	Fruit fly/ beetle	<ul style="list-style-type: none"> - Use Methyl Eugenol as trap @ 4-10 traps/ sangam.



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Onion	Flower bud formation	Thrips/ leaf minor	- Spray Dichlorovos 76 EC @ 0.5ml/lit of water or Cypermethrin @ 2ml/lit of water to the crop during bulb formation stage.
Colocasia	Land preparation for planting		- Prepare land for planting colocasia.
Mandarin & Lemon	For grown up		- Khasi Mandarin apply 500g Urea, 1kg SSP & 400g MOP per plant along with 30 kg cowdung manure compost. - Kachai Lemon apply 350g Urea, 400g SSP & 300g MOP along with 30 kg cowdung manure compost per plant.

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	- 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	Minthal bolus @ ½ bolus for 20 kg body weight orally.
Pig	Above 3 months of age (as and when required)	Swine Fever & FMD	- Vaccinate against swine fever & 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.	- 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.
Cat fish (Ngakra)	Pond and water		Pond water may be replenished with fresh water maintaining a depth of 1m.
	Fish		Male and female brooder fishes may be segregated for breeding operations.
	Feed		Well balanced feed may be fed @ 3-5% body weight/day.

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



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

MANIPUR BULLETIN

11th 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 12th to 16th April, 14 as given below:

Significant past weather for the preceding bi-weekly of Imphal - West (8th to 10th April, 2014)

The sky was partly cloudy to cloudy but mainly clear during afternoon hours of 8th and morning of 10th April. **9.6 mm** rainfall was recorded during past three days. Maximum temperature range observed was 27.4 – 29.2 °C, range of minimum temperature observed was 14.9 – 17.0 °C, mean relative humidity observed in morning and afternoon were 85.33 % and 59.67 % respectively. The average wind speed range was 4.1 – 7.7 km/hr.

Weather forecast for next five days of Ukhrul (12th to 16th April, 2014)

It is likely to have no rain upto Wednesday. Sky may be mainly clear to partly cloudy with maximum temp. of 27.0 – 30.0 °C & minimum temp. 11.0 - 13.0 °C. Relative Humidity may reach a maximum of 72 % (maximum RH) & 22 % (minimum RH). The average wind speed may be 2-5 km/hr during next five days.

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
* Harvest rain water. Drainage may be constructed well in and around the crop field.			
Field Crops			
Early kharif rice	Transplanting		<ul style="list-style-type: none"> - Row planting of 30-45 days old seedlings with 2-3 seedlings per hill may be done at a spacing of 25x10 cm using beaded rope. If seedlings are old, transplant 3-4 seedlings per hill. - Transplanting may be done upto mid of April. - To enhance the establishment of transplanted seedlings, water depth of 2-3cm may be maintained in the field after transplanting then it may be increased gradually upto 5-8 cm after a week.
		Plant hopper & case worm	<ul style="list-style-type: none"> - To prevent plant hopper & case worm, apply Carbofuran 3G @ 1kg/ sangam 7-10 days before uprooting.
Rabi Maize	Vegetative		<ul style="list-style-type: none"> - Urea may be applied @ 66kg/ ha during inter-culture operation. - Thinning may be done. Maintain single plant per hill.
		Stem borer	<ul style="list-style-type: none"> - To control the infestation of stem borer, apply few granules of Carbofuran 3G at maize whorl.
Soybean/ Groundnut/ Blackgram	Land preparation		<ul style="list-style-type: none"> - 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			<ul style="list-style-type: none"> - Clean and store the seeds in RC-seed bins after proper drying. Check for germination of seeds or fungal growth. After proper drying, store grains/ seeds in well ventilated godowns. - Rodent management should be done in and around godowns.
Horticulture Crops			
Cucurbits	Vegetative	Red Pumpkin Beetle	<ul style="list-style-type: none"> - Use Methyl Euginol as trap @ 4-10 traps/ sangam. <p><i>Steps to prepare trap:</i></p> <ul style="list-style-type: none"> - Cut the ½ litre mineral water bottle into two halves. - Mix 2-3 drops of Methyl Euginol 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 attracted.
Tomato	Flowering and fruiting to harvesting in polyhouse		<ul style="list-style-type: none"> - To prevent small sucking insects in the lower surface of leaves, use Ethion 0.05% or Neem oil @2-3 ml / lit of water.
Mango	Flowering	Fruit fly/ beetle	<ul style="list-style-type: none"> - Use Methyl Euginol as trap @ 4-10 traps/ sangam.



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Onion	Flower bud formation	Thrips/ leaf minor	- Spray Dichlorovos 76 EC @ 0.5ml/lit of water or Cypermethrin @ 2ml/lit of water to the crop during bulb formation stage.
Colocasia	Land preparation for planting		- Prepare land for planting colocasia.
Mandarin & Lemon	For grown up		- Khasi Mandarin apply 500g Urea, 1kg SSP & 400g MOP per plant along with 30 kg cowdung manure compost. - Kachai Lemon apply 350g Urea, 400g SSP & 300g MOP along with 30 kg cowdung manure compost per plant.

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	- 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	Minthal bolus @ ½ bolus for 20 kg body weight orally.
Pig	Above 3 months of age (as and when required)	Swine Fever & FMD	- Vaccinate against swine fever & 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.	- 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.
Cat fish (Ngakra)	Pond and water		Pond water may be replenished with fresh water maintaining a depth of 1m.
	Fish		Male and female brooder fishes may be segregated for breeding operations.
	Feed		Well balanced feed may be fed @ 3-5% body weight/day.

(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

11th 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 12th to 16th April, 14 as given below:

Significant past weather for the preceding bi-weekly of Imphal - West (8th to 10th April, 2014)

The sky was partly cloudy to cloudy but mainly clear during afternoon hours of 8th and morning of 10th April. **9.6 mm** rainfall was recorded during past three days. Maximum temperature range observed was 27.4 – 29.2 °C, range of minimum temperature observed was 14.9 – 17.0 °C, mean relative humidity observed in morning and afternoon were 85.33 % and 59.67 % respectively. The average wind speed range was 4.1 – 7.7 km/hr.

Weather forecast for next five days of Bishnupur (12th to 16th April, 2014)

It is likely to have rain with thunderstorm upto wednesday. Sky may be mainly clear to partly cloudy with maximum temp. of 30.0 – 33.0 °C & minimum temp. 14.0 - 16.0 °C. Relative Humidity may reach a maximum of 70 % (maximum RH) & 24 % (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
* Harvest rain water. Drainage may be constructed well in and around the crop field.			
Field Crops			
Early kharif rice	Transplanting		- Row planting of 30-45 days old seedlings with 2-3 seedlings per hill may be done at a spacing of 25x10 cm using beaded rope. If seedlings are old, transplant 3-4 seedlings per hill. - Transplanting may be done upto mid of April. - To enhance the establishment of transplanted seedlings, water depth of 2-3cm may be maintained in the field after transplanting then it may be increased gradually upto 5-8 cm after a week.
		Plant hopper & case worm	- To prevent plant hopper & case worm, apply Carbofuran 3G @ 1kg/ sangam 7-10 days before uprooting.
Rabi Maize	Vegetative		- 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.
Horticulture Crops			
Cucurbits	Vegetative	Red Pumpkin Beetle	- Use Methyl Euginol as trap @ 4-10 traps/ sangam. <i>Steps to prepare trap:</i> - Cut the ½ litre mineral water bottle into two halves. - Mix 2-3 drops of Methyl Euginol 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 attracted.
Tomato	Flowering and fruiting to harvesting in polyhouse		- To prevent small sucking insects in the lower surface of leaves, use Ethion 0.05% or Neem oil @2-3 ml / lit of water.
Mango	Flowering	Fruit fly/ beetle	- Use Methyl Euginol as trap @ 4-10 traps/ sangam.



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



“Integrated Agromet Advisory Services”

Onion	Flower bud formation	Thrips/ leaf minor	- Spray Dichlorovos 76 EC @ 0.5ml/lit of water or Cypermethrin @ 2ml/lit of water to the crop during bulb formation stage.
Colocasia	Land preparation for planting		- Prepare land for planting colocasia.
Mandarin & Lemon	For grown up		- Khasi Mandarin apply 500g Urea, 1kg SSP & 400g MOP per plant along with 30 kg cowdung manure compost. - Kachai Lemon apply 350g Urea, 400g SSP & 300g MOP along with 30 kg cowdung manure compost per plant.

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	- 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	Minthal bolus @ ½ bolus for 20 kg body weight orally.
Pig	Above 3 months of age (as and when required)	Swine Fever & FMD	- Vaccinate against swine fever & 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.	- 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.
Cat fish (Ngakra)	Pond and water		Pond water may be replenished with fresh water maintaining a depth of 1m.
	Fish		Male and female brooder fishes may be segregated for breeding operations.
	Feed		Well balanced feed may be fed @ 3-5% body weight/day.

(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

11th 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 12th to 16th April, 14 as given below:

Significant past weather for the preceding bi-weekly of Imphal - West (8th to 10th April, 2014)

The sky was partly cloudy to cloudy but mainly clear during afternoon hours of 8th and morning of 10th April. **9.6 mm** rainfall was recorded during past three days. Maximum temperature range observed was 27.4 – 29.2 °C, range of minimum temperature observed was 14.9 – 17.0 °C, mean relative humidity observed in morning and afternoon were 85.33 % and 59.67 % respectively. The average wind speed range was 4.1 – 7.7 km/hr.

Weather forecast for next five days of Chandel (12th to 16th April, 2014)

It is likely to have rain with thunderstorm upto Wednesday. Sky may be mainly clear to partly cloudy with maximum temp. of 31.0 – 34.0 °C & minimum temp. 14.0 – 15.0 °C. Relative Humidity may reach a maximum of 70 % (maximum RH) & 21 % (minimum RH). The average wind speed may be 3-5 km/hr during next five days.

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
* Harvest rain water. Drainage may be constructed well in and around the crop field.			
Field Crops			
Early kharif rice	Transplanting		<ul style="list-style-type: none"> - Row planting of 30-45 days old seedlings with 2-3 seedlings per hill may be done at a spacing of 25x10 cm using beaded rope. If seedlings are old, transplant 3-4 seedlings per hill. - Transplanting may be done upto mid of April. - To enhance the establishment of transplanted seedlings, water depth of 2-3cm may be maintained in the field after transplanting then it may be increased gradually upto 5-8 cm after a week.
		Plant hopper & case worm	<ul style="list-style-type: none"> - To prevent plant hopper & case worm, apply Carbofuran 3G @ 1kg/ sangam 7-10 days before uprooting.
Rabi Maize	Vegetative		<ul style="list-style-type: none"> - Urea may be applied @ 66kg/ ha during inter-culture operation. - Thinning may be done. Maintain single plant per hill.
		Stem borer	<ul style="list-style-type: none"> - To control the infestation of stem borer, apply few granules of Carbofuran 3G at maize whorl.
Soybean/ Groundnut/ Blackgram	Land preparation		<ul style="list-style-type: none"> - 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			<ul style="list-style-type: none"> - Clean and store the seeds in RC-seed bins after proper drying. Check for germination of seeds or fungal growth. After proper drying, store grains/ seeds in well ventilated godowns. - Rodent management should be done in and around godowns.
Horticulture Crops			
Cucurbits	Vegetative	Red Pumpkin Beetle	<ul style="list-style-type: none"> - Use Methyl Eugenol as trap @ 4-10 traps/ sangam. <p><i>Steps to prepare trap:</i></p> <ul style="list-style-type: none"> - Cut the ½ litre 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 attracted.
Tomato	Flowering and fruiting to harvesting in polyhouse		<ul style="list-style-type: none"> - To prevent small sucking insects in the lower surface of leaves, use Ethion 0.05% or Neem oil @2-3 ml / lit of water.
Mango	Flowering	Fruit fly/ beetle	<ul style="list-style-type: none"> - Use Methyl Eugenol as trap @ 4-10 traps/ sangam.



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“Integrated Agromet Advisory Services”

Onion	Flower bud formation	Thrips/ leaf minor	- Spray Dichlorovos 76 EC @ 0.5ml/lit of water or Cypermethrin @ 2ml/lit of water to the crop during bulb formation stage.
Colocasia	Land preparation for planting		- Prepare land for planting colocasia.
Mandarin & Lemon	For grown up		- Khasi Mandarin apply 500g Urea, 1kg SSP & 400g MOP per plant along with 30 kg cowdung manure compost. - Kachai Lemon apply 350g Urea, 400g SSP & 300g MOP along with 30 kg cowdung manure compost per plant.

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	- 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	Minthal bolus @ ½ bolus for 20 kg body weight orally.
Pig	Above 3 months of age (as and when required)	Swine Fever & FMD	- Vaccinate against swine fever & 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.	- 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.
Cat fish (Ngakra)	Pond and water		Pond water may be replenished with fresh water maintaining a depth of 1m.
	Fish		Male and female brooder fishes may be segregated for breeding operations.
	Feed		Well balanced feed may be fed @ 3-5% body weight/day.

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



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MANIPUR BULLETIN

11th 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 12th to 16th April, 14 as given below:

Significant past weather for the preceding bi-weekly of Imphal - West (8th to 10th April, 2014)

The sky was partly cloudy to cloudy but mainly clear during afternoon hours of 8th and morning of 10th April. **9.6 mm** rainfall was recorded during past three days. Maximum temperature range observed was 27.4 – 29.2 °C, range of minimum temperature observed was 14.9 – 17.0 °C, mean relative humidity observed in morning and afternoon were 85.33 % and 59.67 % respectively. The average wind speed range was 4.1 – 7.7 km/hr.

Weather forecast for next five days of Churachandpur (12th to 16th April, 2014)

It is likely to have no rain upto Wednesday. Sky may be mainly clear to partly cloudy with maximum temp. of 30.0 – 33.0 °C & minimum temp. 13.0 - 16.0 °C. Relative Humidity may reach a maximum of 65 % (maximum RH) & 22 % (minimum RH). The average wind speed may be 4-6 km/hr during next five days.

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
* Harvest rain water. Drainage may be constructed well in and around the crop field.			
Field Crops			
Early kharif rice	Transplanting		<ul style="list-style-type: none"> - Row planting of 30-45 days old seedlings with 2-3 seedlings per hill may be done at a spacing of 25x10 cm using beaded rope. If seedlings are old, transplant 3-4 seedlings per hill. - Transplanting may be done upto mid of April. - To enhance the establishment of transplanted seedlings, water depth of 2-3cm may be maintained in the field after transplanting then it may be increased gradually upto 5-8 cm after a week.
		Plant hopper & case worm	<ul style="list-style-type: none"> - To prevent plant hopper & case worm, apply Carbofuran 3G @ 1kg/ sangam 7-10 days before uprooting.
Rabi Maize	Vegetative		<ul style="list-style-type: none"> - Urea may be applied @ 66kg/ ha during inter-culture operation. - Thinning may be done. Maintain single plant per hill.
		Stem borer	<ul style="list-style-type: none"> - To control the infestation of stem borer, apply few granules of Carbofuran 3G at maize whorl.
Soybean/ Groundnut/ Blackgram	Land preparation		<ul style="list-style-type: none"> - 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			<ul style="list-style-type: none"> - Clean and store the seeds in RC-seed bins after proper drying. Check for germination of seeds or fungal growth. After proper drying, store grains/ seeds in well ventilated godowns. - Rodent management should be done in and around godowns.
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