



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



“Integrated Agromet Advisory Services”

MANIPUR BULLETIN

11th March, 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 March, 14 as given below:

Significant past weather for the preceding bi-weekly of Imphal - West (7th to 10th March, 2014)

The sky was mainly clear to partly cloudy but mainly cloudy on 10th and afternoon hours of 7th March. No rainfall was recorded during past four days. Maximum temperature range observed was 24.0 – 29.2 °C, range of minimum temperature observed was 5.0 – 7.0 °C, mean relative humidity observed in morning and afternoon were 84.75 % and 42.75 % respectively. The average wind speed range was 2.4 – 5.0 km/hr.

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

Light rain is predicted on Saturday. Sky may be mainly clear to partly but mainly cloudy on Friday with maximum temp. of 26.0 -28.0 °C & minimum temp. 4.0 – 7.0 °C. Relative Humidity may reach a maximum of 92 % (maximum RH) & 22 % (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			
Pre-kharif Rice	Nursery and main field preparation		<ul style="list-style-type: none"> - Maintained optimum water level in nursery. - If yellowing of leaves of seedlings is observed, spray Chloropyriphos 0.05% @ 2ml/lit water to control plant hopper. - Before first ploughing of main field, apply well decomposed FYM @10-15 t/ha. After a cross plough, irrigate the field to 5-7 cm depth. Submerge soil for 15-20 days before planting to obtain weed free plot. - At the time of final leveling, apply 97 kg Urea, 87Kg DAP and 45 Kg MOP per ha.
Rapeseed/ Mustard	Harvesting to post-harvesting		<ul style="list-style-type: none"> - Make small bundles of the harvest and keep in well ventilated shed in erect position for 3-4 days for better grain filling and better quality seeds. - Dry the harvest for 5-6 days in sun and thresh. Clean the seeds thoroughly and store after proper drying.
Rabi Maize	Vegetative		<ul style="list-style-type: none"> - Irrigate to maintain required soil moisture during this phase. - Earthing-up of rabi maize crop and top dress with nitrogen fertilizer may be done if the plant is knee high.
		Stem borer	<ul style="list-style-type: none"> - To control the infestation of stem borer, apply few granules of Carbofuran 3G at maize whorl.
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			
Tomato	Vegetative	Early blight	<ul style="list-style-type: none"> - Apply Dithane M-45 @ 2gm/ lit of water twice at 7 days interval as a prophylactic measure against early blight. - After 30 days of transplanting apply Urea @ 50-60 kg /sangan as top dressing.
Onion/ Garlic	Bulb formation	leaf minor	<ul style="list-style-type: none"> - During the bulb formation stage, check that the neck portion is not covered with soil. - Light hoeing and irrigation is necessary to keep soil moist during this phase. - Pinch off the flower as soon as it is observed at the base. - Spray Dichlorovos 36 EC @ 0.5ml/lit of water or Monocrotophos 76EC @ 1ml/lit of water to protect the crop from infestation of leaf minor. Spray is to be given twice or thrice at an interval of 7 to 10 days.



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



“Integrated Agromet Advisory Services”

		Purple bloch and bulb rot	- Spray Sixer @ 2 gm/lit of water as prophylactic measure against Purple bloch and Bulb rot. Spray is to be given twice at an interval of 7 to 10 days.
Fruit Crops	Vegetative		Provide life saving irrigation to passion fruit, pineapple and other fruit crops. Use dry grass or twigs as mulching material at the basin to conserve the soil moisture.
Ginger/ turmeric	Planting		- While preparing land for planting ginger/ turmeric apply 1 t FYM, 65 kg Urea, 375 kg SSP and 80 kg MOP. - Recommended varieties: For turmeric: Megha turmeric For ginger: Nadia - Use healthy mother rhizome of 25-30g weight and plant at a spacing of 1 ft x 1 ft. Treat the seed rhizome with Captan (@ 2g/ lit water) or Mencozeb (@ 3g/ lit of water) for 15-20 minutes and keep under shed before planting.
Citrus	Nursery	Leaf Minor	- Spray Monocrotophos @ 1ml/ lit of water or Cypermethrin @ 2.5 ml/ lit of water against leaf minor in nursery.
French Bean	Sowing to vegetative		- Spacings: for dwarf variety (30x45 cm from seed to seed & row to row) and for pole type at 60x60 cm with 2-3 seeds per hill. - Apply 12-13 kg Urea, 12-15 kg SSP and 40-45 kg MOP per ha at the time of sowing. - Maintain optimum soil moisture.

Animal Sciences

Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
Poultry	All susceptible age groups (as and when required)	Ranikhet disease	1. F-1 Strain first dose within 7 days of age and second dose may be given at 30days for all birds (eye drop/ ocular). 2. R ₂ B vaccine to 8-9 weeks of age group birds (layers) (intra-muscularly @ 0.2 cc/ bird). 3. Killed ND virus vaccine of 16-18 weeks of age group birds (layers) (intra-muscularly).
Sheep/ Goat	Above 3 months of age (as and when required)	FMD	Vaccinate against Foot and mouth disease.
		H.S.	Vaccinate against Haemorrhagic Septicaemia.
		B.Q.	Vaccinate against Black Quarter.
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	- Spray Butox @ 2ml in 1 lit of water, twice a week.
			- Administer Minamil powder @ 15-20g/ day in feed.
Cattle / Buffalo/ Mithun	Above 3 months of age (as and when required)	FMD	Vaccinate against Foot and mouth disease.
		H.S.	Vaccinate against Haemorrhagic Septicaemia.
		B.Q.	Vaccinate against Black Quarter.

(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 March, 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 March, 14 as given below:

Significant past weather for the preceding bi-weekly of Imphal - West (7th to 10th March, 2014)

The sky was mainly clear to partly cloudy but mainly cloudy on 10th and afternoon hours of 7th March. No rainfall was recorded during past four days. Maximum temperature range observed was 24.0 – 29.2 °C, range of minimum temperature observed was 5.0 – 7.0 °C, mean relative humidity observed in morning and afternoon were 84.75 % and 42.75 % respectively. The average wind speed range was 2.4 – 5.0 km/hr.

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

Light rain is predicted on Saturday. Sky may be mainly clear to partly but mainly cloudy on Friday with maximum temp. of 27.0 -29.0 °C & minimum temp. 6.0 – 9.0 °C. Relative Humidity may reach a maximum of 89 % (maximum RH) & 22 % (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			
Pre-kharif Rice	Nursery and main field preparation		<ul style="list-style-type: none"> - Maintained optimum water level in nursery. - If yellowing of leaves of seedlings is observed, spray Chloropyriphos 0.05% @ 2ml/lit water to control plant hopper. - Before first ploughing of main field, apply well decomposed FYM @10-15 t/ha. After a cross plough, irrigate the field to 5-7 cm depth. Submerge soil for 15-20 days before planting to obtain weed free plot. - At the time of final leveling, apply 97 kg Urea, 87Kg DAP and 45 Kg MOP per ha.
Rapeseed/ Mustard	Harvesting to post-harvesting		<ul style="list-style-type: none"> - Make small bundles of the harvest and keep in well ventilated shed in erect position for 3-4 days for better grain filling and better quality seeds. - Dry the harvest for 5-6 days in sun and thresh. Clean the seeds thoroughly and store after proper drying.
Rabi Maize	Vegetative		<ul style="list-style-type: none"> - Irrigate to maintain required soil moisture during this phase. - Earthing-up of rabi maize crop and top dress with nitrogen fertilizer may be done if the plant is knee high.
		Stem borer	<ul style="list-style-type: none"> - To control the infestation of stem borer, apply few granules of Carbofuran 3G at maize whorl.
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			
Tomato	Vegetative	Early blight	<ul style="list-style-type: none"> - Apply Dithane M-45 @ 2gm/ lit of water twice at 7 days interval as a prophylactic measure against early blight. - After 30 days of transplanting apply Urea @ 50-60 kg /sangan as top dressing.
Onion/ Garlic	Bulb formation	leaf minor	<ul style="list-style-type: none"> - During the bulb formation stage, check that the neck portion is not covered with soil. - Light hoeing and irrigation is necessary to keep soil moist during this phase. - Pinch off the flower as soon as it is observed at the base. - Spray Dichlorovos 36 EC @ 0.5ml/lit of water or Monocrotophos 76EC @ 1ml/lit of water to protect the crop from infestation of leaf minor. Spray is to be given twice or thrice at an interval of 7 to 10 days.



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



“Integrated Agromet Advisory Services”

		Purple bloch and bulb rot	- Spray Sixer @ 2 gm/lit of water as prophylactic measure against Purple bloch and Bulb rot. Spray is to be given twice at an interval of 7 to 10 days.
Fruit Crops	Vegetative		Provide life saving irrigation to passion fruit, pineapple and other fruit crops. Use dry grass or twigs as mulching material at the basin to conserve the soil moisture.
Ginger/ turmeric	Planting		- While preparing land for planting ginger/ turmeric apply 1 t FYM, 65 kg Urea, 375 kg SSP and 80 kg MOP. - Recommended varieties: For turmeric: Megha turmeric For ginger: Nadia - Use healthy mother rhizome of 25-30g weight and plant at a spacing of 1 ft x 1 ft. Treat the seed rhizome with Captan (@ 2g/ lit water) or Mencozeb (@ 3g/ lit of water) for 15-20 minutes and keep under shed before planting.
Citrus	Nursery	Leaf Minor	- Spray Monocrotophos @ 1ml/ lit of water or Cypermethrin @ 2.5 ml/ lit of water against leaf minor in nursery.
French Bean	Sowing to vegetative		- Spacings: for dwarf variety (30x45 cm from seed to seed & row to row) and for pole type at 60x60 cm with 2-3 seeds per hill. - Apply 12-13 kg Urea, 12-15 kg SSP and 40-45 kg MOP per ha at the time of sowing. - Maintain optimum soil moisture.

Animal Sciences

Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
Poultry	All susceptible age groups (as and when required)	Ranikhet disease	1. F-1 Strain first dose within 7 days of age and second dose may be given at 30days for all birds (eye drop/ ocular). 2. R ₂ B vaccine to 8-9 weeks of age group birds (layers) (intra-muscularly @ 0.2 cc/ bird). 3. Killed ND virus vaccine of 16-18 weeks of age group birds (layers) (intra-muscularly).
Sheep/ Goat	Above 3 months of age (as and when required)	FMD	Vaccinate against Foot and mouth disease.
		H.S.	Vaccinate against Haemorrhagic Septicaemia.
		B.Q.	Vaccinate against Black Quarter.
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	- Spray Butox @ 2ml in 1 lit of water, twice a week.
			- Administer Minamil powder @ 15-20g/ day in feed.
Cattle / Buffalo/ Mithun	Above 3 months of age (as and when required)	FMD	Vaccinate against Foot and mouth disease.
		H.S.	Vaccinate against Haemorrhagic Septicaemia.
		B.Q.	Vaccinate against Black Quarter.

(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 March, 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 March, 14 as given below:

Significant past weather for the preceding bi-weekly of Imphal - West (7th to 10th March, 2014)

The sky was mainly clear to partly cloudy but mainly cloudy on 10th and afternoon hours of 7th March. No rainfall was recorded during past four days. Maximum temperature range observed was 24.0 – 29.2 °C, range of minimum temperature observed was 5.0 – 7.0 °C, mean relative humidity observed in morning and afternoon were 84.75 % and 42.75 % respectively. The average wind speed range was 2.4 – 5.0 km/hr.

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

Light rain is predicted on Saturday. Sky may be mainly clear to partly but mainly cloudy on Friday with maximum temp. of 25.0 - 27.0 °C & minimum temp. 4.0 – 6.0 °C. Relative Humidity may reach a maximum of 87 % (maximum RH) & 21 % (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			
Pre-kharif Rice	Nursery and main field preparation		<ul style="list-style-type: none"> - Maintained optimum water level in nursery. - If yellowing of leaves of seedlings is observed, spray Chloropyriphos 0.05% @ 2ml/lit water to control plant hopper. - Before first ploughing of main field, apply well decomposed FYM @10-15 t/ha. After a cross plough, irrigate the field to 5-7 cm depth. Submerge soil for 15-20 days before planting to obtain weed free plot. - At the time of final leveling, apply 97 kg Urea, 87Kg DAP and 45 Kg MOP per ha.
Rapeseed/ Mustard	Harvesting to post-harvesting		<ul style="list-style-type: none"> - Make small bundles of the harvest and keep in well ventilated shed in erect position for 3-4 days for better grain filling and better quality seeds. - Dry the harvest for 5-6 days in sun and thresh. Clean the seeds thoroughly and store after proper drying.
Rabi Maize	Vegetative		<ul style="list-style-type: none"> - Irrigate to maintain required soil moisture during this phase. - Earthing-up of rabi maize crop and top dress with nitrogen fertilizer may be done if the plant is knee high.
		Stem borer	<ul style="list-style-type: none"> - To control the infestation of stem borer, apply few granules of Carbofuran 3G at maize whorl.
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			
Tomato	Vegetative	Early blight	<ul style="list-style-type: none"> - Apply Dithane M-45 @ 2gm/ lit of water twice at 7 days interval as a prophylactic measure against early blight. - After 30 days of transplanting apply Urea @ 50-60 kg /sangan as top dressing.
Onion/ Garlic	Bulb formation	leaf minor	<ul style="list-style-type: none"> - During the bulb formation stage, check that the neck portion is not covered with soil. - Light hoeing and irrigation is necessary to keep soil moist during this phase. - Pinch off the flower as soon as it is observed at the base. - Spray Dichlorovos 36 EC @ 0.5ml/lit of water or Monocrotophos 76EC @ 1ml/lit of water to protect the crop from infestation of leaf minor. Spray is to be given twice or thrice at an interval of 7 to 10 days.



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



“Integrated Agromet Advisory Services”

		Purple bloch and bulb rot	- Spray Sixer @ 2 gm/lit of water as prophylactic measure against Purple bloch and Bulb rot. Spray is to be given twice at an interval of 7 to 10 days.
Fruit Crops	Vegetative		Provide life saving irrigation to passion fruit, pineapple and other fruit crops. Use dry grass or twigs as mulching material at the basin to conserve the soil moisture.
Ginger/ turmeric	Planting		- While preparing land for planting ginger/ turmeric apply 1 t FYM, 65 kg Urea, 375 kg SSP and 80 kg MOP. - Recommended varieties: For turmeric: Megha turmeric For ginger: Nadia - Use healthy mother rhizome of 25-30g weight and plant at a spacing of 1 ft x 1 ft. Treat the seed rhizome with Captan (@ 2g/ lit water) or Mencozeb (@ 3g/ lit of water) for 15-20 minutes and keep under shed before planting.
Citrus	Nursery	Leaf Minor	- Spray Monocrotophos @ 1ml/ lit of water or Cypermethrin @ 2.5 ml/ lit of water against leaf minor in nursery.
French Bean	Sowing to vegetative		- Spacings: for dwarf variety (30x45 cm from seed to seed & row to row) and for pole type at 60x60 cm with 2-3 seeds per hill. - Apply 12-13 kg Urea, 12-15 kg SSP and 40-45 kg MOP per ha at the time of sowing. - Maintain optimum soil moisture.

Animal Sciences

Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
Poultry	All susceptible age groups (as and when required)	Ranikhet disease	1. F-1 Strain first dose within 7 days of age and second dose may be given at 30days for all birds (eye drop/ ocular). 2. R ₂ B vaccine to 8-9 weeks of age group birds (layers) (intra-muscularly @ 0.2 cc/ bird). 3. Killed ND virus vaccine of 16-18 weeks of age group birds (layers) (intra-muscularly).
Sheep/ Goat	Above 3 months of age (as and when required)	FMD	Vaccinate against Foot and mouth disease.
		H.S.	Vaccinate against Haemorrhagic Septicaemia.
		B.Q.	Vaccinate against Black Quarter.
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	- Spray Butox @ 2ml in 1 lit of water, twice a week.
			- Administer Minamil powder @ 15-20g/ day in feed.
Cattle / Buffalo/ Mithun	Above 3 months of age (as and when required)	FMD	Vaccinate against Foot and mouth disease.
		H.S.	Vaccinate against Haemorrhagic Septicaemia.
		B.Q.	Vaccinate against Black Quarter.

(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 March, 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 March, 14 as given below:

Significant past weather for the preceding bi-weekly of Imphal - West (7th to 10th March, 2014)

The sky was mainly clear to partly cloudy but mainly cloudy on 10th and afternoon hours of 7th March. No rainfall was recorded during past four days. Maximum temperature range observed was 24.0 – 29.2 °C, range of minimum temperature observed was 5.0 – 7.0 °C, mean relative humidity observed in morning and afternoon were 84.75 % and 42.75 % respectively. The average wind speed range was 2.4 – 5.0 km/hr.

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

Light rain is predicted on Saturday. Sky may be mainly clear to partly but mainly cloudy on Friday with maximum temp. of 28.0 - 31.0 °C & minimum temp. 7.0 – 11.0 °C. Relative Humidity may reach a maximum of 82 % (maximum RH) & 21 % (minimum RH). The average wind speed may be 3-4 km/hr during next five days.

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
Field Crops			
Pre-kharif Rice	Nursery and main field preparation		<ul style="list-style-type: none"> - Maintained optimum water level in nursery. - If yellowing of leaves of seedlings is observed, spray Chloropyriphos 0.05% @ 2ml/lit water to control plant hopper. - Before first ploughing of main field, apply well decomposed FYM @10-15 t/ha. After a cross plough, irrigate the field to 5-7 cm depth. Submerge soil for 15-20 days before planting to obtain weed free plot. - At the time of final leveling, apply 97 kg Urea, 87Kg DAP and 45 Kg MOP per ha.
Rapeseed/ Mustard	Harvesting to post-harvesting		<ul style="list-style-type: none"> - Make small bundles of the harvest and keep in well ventilated shed in erect position for 3-4 days for better grain filling and better quality seeds. - Dry the harvest for 5-6 days in sun and thresh. Clean the seeds thoroughly and store after proper drying.
Rabi Maize	Vegetative		<ul style="list-style-type: none"> - Irrigate to maintain required soil moisture during this phase. - Earthing-up of rabi maize crop and top dress with nitrogen fertilizer may be done if the plant is knee high.
		Stem borer	<ul style="list-style-type: none"> - To control the infestation of stem borer, apply few granules of Carbofuran 3G at maize whorl.
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			
Tomato	Vegetative	Early blight	<ul style="list-style-type: none"> - Apply Dithane M-45 @ 2gm/ lit of water twice at 7 days interval as a prophylactic measure against early blight. - After 30 days of transplanting apply Urea @ 50-60 kg /sangan as top dressing.
Onion/ Garlic	Bulb formation	leaf minor	<ul style="list-style-type: none"> - During the bulb formation stage, check that the neck portion is not covered with soil. - Light hoeing and irrigation is necessary to keep soil moist during this phase. - Pinch off the flower as soon as it is observed at the base. - Spray Dichlorovos 36 EC @ 0.5ml/lit of water or Monocrotophos 76EC @ 1ml/lit of water to protect the crop from infestation of leaf minor. Spray is to be given twice or thrice at an interval of 7 to 10 days.



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



“Integrated Agromet Advisory Services”

		Purple bloch and bulb rot	- Spray Sixer @ 2 gm/lit of water as prophylactic measure against Purple bloch and Bulb rot. Spray is to be given twice at an interval of 7 to 10 days.
Fruit Crops	Vegetative		Provide life saving irrigation to passion fruit, pineapple and other fruit crops. Use dry grass or twigs as mulching material at the basin to conserve the soil moisture.
Ginger/ turmeric	Planting		- While preparing land for planting ginger/ turmeric apply 1 t FYM, 65 kg Urea, 375 kg SSP and 80 kg MOP. - Recommended varieties: For turmeric: Megha turmeric For ginger: Nadia - Use healthy mother rhizome of 25-30g weight and plant at a spacing of 1 ft x 1 ft. Treat the seed rhizome with Captan (@ 2g/ lit water) or Mencozeb (@ 3g/ lit of water) for 15-20 minutes and keep under shed before planting.
Citrus	Nursery	Leaf Minor	- Spray Monocrotophos @ 1ml/ lit of water or Cypermethrin @ 2.5 ml/ lit of water against leaf minor in nursery.
French Bean	Sowing to vegetative		- Spacings: for dwarf variety (30x45 cm from seed to seed & row to row) and for pole type at 60x60 cm with 2-3 seeds per hill. - Apply 12-13 kg Urea, 12-15 kg SSP and 40-45 kg MOP per ha at the time of sowing. - Maintain optimum soil moisture.

Animal Sciences

Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
Poultry	All susceptible age groups (as and when required)	Ranikhet disease	1. F-1 Strain first dose within 7 days of age and second dose may be given at 30days for all birds (eye drop/ ocular). 2. R ₂ B vaccine to 8-9 weeks of age group birds (layers) (intra-muscularly @ 0.2 cc/ bird). 3. Killed ND virus vaccine of 16-18 weeks of age group birds (layers) (intra-muscularly).
Sheep/ Goat	Above 3 months of age (as and when required)	FMD	Vaccinate against Foot and mouth disease.
		H.S.	Vaccinate against Haemorrhagic Septicaemia.
		B.Q.	Vaccinate against Black Quarter.
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	- Spray Butox @ 2ml in 1 lit of water, twice a week.
			- Administer Minamil powder @ 15-20g/ day in feed.
Cattle / Buffalo/ Mithun	Above 3 months of age (as and when required)	FMD	Vaccinate against Foot and mouth disease.
		H.S.	Vaccinate against Haemorrhagic Septicaemia.
		B.Q.	Vaccinate against Black Quarter.

(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 March, 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 March, 14 as given below:

Significant past weather for the preceding bi-weekly of Imphal - West (7th to 10th March, 2014)

The sky was mainly clear to partly cloudy but mainly cloudy on 10th and afternoon hours of 7th March. No rainfall was recorded during past four days. Maximum temperature range observed was 24.0 – 29.2 °C, range of minimum temperature observed was 5.0 – 7.0 °C, mean relative humidity observed in morning and afternoon were 84.75 % and 42.75 % respectively. The average wind speed range was 2.4 – 5.0 km/hr.

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

Light rain is predicted on Saturday. Sky may be mainly clear to partly but mainly cloudy on Friday with maximum temp. of 28.0 -30.0 °C & minimum temp. 8.0 – 10.0 °C. Relative Humidity may reach a maximum of 76 % (maximum RH) & 23 % (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
Field Crops			
Pre-kharif Rice	Nursery and main field preparation		<ul style="list-style-type: none"> - Maintained optimum water level in nursery. - If yellowing of leaves of seedlings is observed, spray Chloropyriphos 0.05% @ 2ml/lit water to control plant hopper. - Before first ploughing of main field, apply well decomposed FYM @10-15 t/ha. After a cross plough, irrigate the field to 5-7 cm depth. Submerge soil for 15-20 days before planting to obtain weed free plot. - At the time of final leveling, apply 97 kg Urea, 87Kg DAP and 45 Kg MOP per ha.
Rapeseed/ Mustard	Harvesting to post-harvesting		<ul style="list-style-type: none"> - Make small bundles of the harvest and keep in well ventilated shed in erect position for 3-4 days for better grain filling and better quality seeds. - Dry the harvest for 5-6 days in sun and thresh. Clean the seeds thoroughly and store after proper drying.
Rabi Maize	Vegetative		<ul style="list-style-type: none"> - Irrigate to maintain required soil moisture during this phase. - Earthing-up of rabi maize crop and top dress with nitrogen fertilizer may be done if the plant is knee high.
		Stem borer	<ul style="list-style-type: none"> - To control the infestation of stem borer, apply few granules of Carbofuran 3G at maize whorl.
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			
Tomato	Vegetative	Early blight	<ul style="list-style-type: none"> - Apply Dithane M-45 @ 2gm/ lit of water twice at 7 days interval as a prophylactic measure against early blight. - After 30 days of transplanting apply Urea @ 50-60 kg /sangan as top dressing.
Onion/ Garlic	Bulb formation	leaf minor	<ul style="list-style-type: none"> - During the bulb formation stage, check that the neck portion is not covered with soil. - Light hoeing and irrigation is necessary to keep soil moist during this phase. - Pinch off the flower as soon as it is observed at the base. - Spray Dichlorovos 36 EC @ 0.5ml/lit of water or Monocrotophos 76EC @ 1ml/lit of water to protect the crop from infestation of leaf minor. Spray is to be given twice or thrice at an interval of 7 to 10 days.



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



“Integrated Agromet Advisory Services”

		Purple bloch and bulb rot	- Spray Sixer @ 2 gm/lit of water as prophylactic measure against Purple bloch and Bulb rot. Spray is to be given twice at an interval of 7 to 10 days.
Fruit Crops	Vegetative		Provide life saving irrigation to passion fruit, pineapple and other fruit crops. Use dry grass or twigs as mulching material at the basin to conserve the soil moisture.
Ginger/ turmeric	Planting		- While preparing land for planting ginger/ turmeric apply 1 t FYM, 65 kg Urea, 375 kg SSP and 80 kg MOP. - Recommended varieties: For turmeric: Megha turmeric For ginger: Nadia - Use healthy mother rhizome of 25-30g weight and plant at a spacing of 1 ft x 1 ft. Treat the seed rhizome with Captan (@ 2g/ lit water) or Mencozeb (@ 3g/ lit of water) for 15-20 minutes and keep under shed before planting.
Citrus	Nursery	Leaf Minor	- Spray Monocrotophos @ 1ml/ lit of water or Cypermethrin @ 2.5 ml/ lit of water against leaf minor in nursery.
French Bean	Sowing to vegetative		- Spacings: for dwarf variety (30x45 cm from seed to seed & row to row) and for pole type at 60x60 cm with 2-3 seeds per hill. - Apply 12-13 kg Urea, 12-15 kg SSP and 40-45 kg MOP per ha at the time of sowing. - Maintain optimum soil moisture.

Animal Sciences

Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
Poultry	All susceptible age groups (as and when required)	Ranikhet disease	1. F-1 Strain first dose within 7 days of age and second dose may be given at 30days for all birds (eye drop/ ocular). 2. R ₂ B vaccine to 8-9 weeks of age group birds (layers) (intra-muscularly @ 0.2 cc/ bird). 3. Killed ND virus vaccine of 16-18 weeks of age group birds (layers) (intra-muscularly).
Sheep/ Goat	Above 3 months of age (as and when required)	FMD	Vaccinate against Foot and mouth disease.
		H.S.	Vaccinate against Haemorrhagic Septicaemia.
		B.Q.	Vaccinate against Black Quarter.
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	- Spray Butox @ 2ml in 1 lit of water, twice a week.
			- Administer Minamil powder @ 15-20g/ day in feed.
Cattle / Buffalo/ Mithun	Above 3 months of age (as and when required)	FMD	Vaccinate against Foot and mouth disease.
		H.S.	Vaccinate against Haemorrhagic Septicaemia.
		B.Q.	Vaccinate against Black Quarter.

(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 March, 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 March, 14 as given below:

Significant past weather for the preceding bi-weekly of Imphal - West (7th to 10th March, 2014)

The sky was mainly clear to partly cloudy but mainly cloudy on 10th and afternoon hours of 7th March. No rainfall was recorded during past four days. Maximum temperature range observed was 24.0 – 29.2 °C, range of minimum temperature observed was 5.0 – 7.0 °C, mean relative humidity observed in morning and afternoon were 84.75 % and 42.75 % respectively. The average wind speed range was 2.4 – 5.0 km/hr.

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

Light rain is predicted on Saturday. Sky may be mainly clear to partly but mainly cloudy on Friday with maximum temp. of 25.0 - 26.0 °C & minimum temp. 4.0 – 6.0 °C. Relative Humidity may reach a maximum of 72 % (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			
Pre-kharif Rice	Nursery and main field preparation		<ul style="list-style-type: none"> - Maintained optimum water level in nursery. - If yellowing of leaves of seedlings is observed, spray Chloropyriphos 0.05% @ 2ml/lit water to control plant hopper. - Before first ploughing of main field, apply well decomposed FYM @10-15 t/ha. After a cross plough, irrigate the field to 5-7 cm depth. Submerge soil for 15-20 days before planting to obtain weed free plot. - At the time of final leveling, apply 97 kg Urea, 87Kg DAP and 45 Kg MOP per ha.
Rapeseed/ Mustard	Harvesting to post-harvesting		<ul style="list-style-type: none"> - Make small bundles of the harvest and keep in well ventilated shed in erect position for 3-4 days for better grain filling and better quality seeds. - Dry the harvest for 5-6 days in sun and thresh. Clean the seeds thoroughly and store after proper drying.
Rabi Maize	Vegetative		<ul style="list-style-type: none"> - Irrigate to maintain required soil moisture during this phase. - Earthing-up of rabi maize crop and top dress with nitrogen fertilizer may be done if the plant is knee high.
		Stem borer	<ul style="list-style-type: none"> - To control the infestation of stem borer, apply few granules of Carbofuran 3G at maize whorl.
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			
Tomato	Vegetative	Early blight	<ul style="list-style-type: none"> - Apply Dithane M-45 @ 2gm/ lit of water twice at 7 days interval as a prophylactic measure against early blight. - After 30 days of transplanting apply Urea @ 50-60 kg /sangan as top dressing.
Onion/ Garlic	Bulb formation	leaf minor	<ul style="list-style-type: none"> - During the bulb formation stage, check that the neck portion is not covered with soil. - Light hoeing and irrigation is necessary to keep soil moist during this phase. - Pinch off the flower as soon as it is observed at the base. - Spray Dichlorovos 36 EC @ 0.5ml/lit of water or Monocrotophos 76EC @ 1ml/lit of water to protect the crop from infestation of leaf minor. Spray is to be given twice or thrice at an interval of 7 to 10 days.



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



“Integrated Agromet Advisory Services”

		Purple bloch and bulb rot	- Spray Sixer @ 2 gm/lit of water as prophylactic measure against Purple bloch and Bulb rot. Spray is to be given twice at an interval of 7 to 10 days.
Fruit Crops	Vegetative		Provide life saving irrigation to passion fruit, pineapple and other fruit crops. Use dry grass or twigs as mulching material at the basin to conserve the soil moisture.
Ginger/ turmeric	Planting		- While preparing land for planting ginger/ turmeric apply 1 t FYM, 65 kg Urea, 375 kg SSP and 80 kg MOP. - Recommended varieties: For turmeric: Megha turmeric For ginger: Nadia - Use healthy mother rhizome of 25-30g weight and plant at a spacing of 1 ft x 1 ft. Treat the seed rhizome with Captan (@ 2g/ lit water) or Mencozeb (@ 3g/ lit of water) for 15-20 minutes and keep under shed before planting.
Citrus	Nursery	Leaf Minor	- Spray Monocrotophos @ 1ml/ lit of water or Cypermethrin @ 2.5 ml/ lit of water against leaf minor in nursery.
French Bean	Sowing to vegetative		- Spacings: for dwarf variety (30x45 cm from seed to seed & row to row) and for pole type at 60x60 cm with 2-3 seeds per hill. - Apply 12-13 kg Urea, 12-15 kg SSP and 40-45 kg MOP per ha at the time of sowing. - Maintain optimum soil moisture.

Animal Sciences

Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
Poultry	All susceptible age groups (as and when required)	Ranikhet disease	1. F-1 Strain first dose within 7 days of age and second dose may be given at 30days for all birds (eye drop/ ocular). 2. R ₂ B vaccine to 8-9 weeks of age group birds (layers) (intra-muscularly @ 0.2 cc/ bird). 3. Killed ND virus vaccine of 16-18 weeks of age group birds (layers) (intra-muscularly).
Sheep/ Goat	Above 3 months of age (as and when required)	FMD	Vaccinate against Foot and mouth disease.
		H.S.	Vaccinate against Haemorrhagic Septicaemia.
		B.Q.	Vaccinate against Black Quarter.
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	- Spray Butox @ 2ml in 1 lit of water, twice a week.
			- Administer Minamil powder @ 15-20g/ day in feed.
Cattle / Buffalo/ Mithun	Above 3 months of age (as and when required)	FMD	Vaccinate against Foot and mouth disease.
		H.S.	Vaccinate against Haemorrhagic Septicaemia.
		B.Q.	Vaccinate against Black Quarter.

(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 March, 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 March, 14 as given below:

Significant past weather for the preceding bi-weekly of Imphal - West (7th to 10th March, 2014)

The sky was mainly clear to partly cloudy but mainly cloudy on 10th and afternoon hours of 7th March. No rainfall was recorded during past four days. Maximum temperature range observed was 24.0 – 29.2 °C, range of minimum temperature observed was 5.0 – 7.0 °C, mean relative humidity observed in morning and afternoon were 84.75 % and 42.75 % respectively. The average wind speed range was 2.4 – 5.0 km/hr.

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

Light rain is predicted on Saturday. Sky may be mainly clear to partly but mainly cloudy on Friday with maximum temp. of 28.0 -29.0 °C & minimum temp. 9.0 – 11.0 °C. Relative Humidity may reach a maximum of 79 % (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
Field Crops			
Pre-kharif Rice	Nursery and main field preparation		<ul style="list-style-type: none"> - Maintained optimum water level in nursery. - If yellowing of leaves of seedlings is observed, spray Chloropyriphos 0.05% @ 2ml/lit water to control plant hopper. - Before first ploughing of main field, apply well decomposed FYM @10-15 t/ha. After a cross plough, irrigate the field to 5-7 cm depth. Submerge soil for 15-20 days before planting to obtain weed free plot. - At the time of final leveling, apply 97 kg Urea, 87Kg DAP and 45 Kg MOP per ha.
Rapeseed/ Mustard	Harvesting to post-harvesting		<ul style="list-style-type: none"> - Make small bundles of the harvest and keep in well ventilated shed in erect position for 3-4 days for better grain filling and better quality seeds. - Dry the harvest for 5-6 days in sun and thresh. Clean the seeds thoroughly and store after proper drying.
Rabi Maize	Vegetative		<ul style="list-style-type: none"> - Irrigate to maintain required soil moisture during this phase. - Earthing-up of rabi maize crop and top dress with nitrogen fertilizer may be done if the plant is knee high.
		Stem borer	<ul style="list-style-type: none"> - To control the infestation of stem borer, apply few granules of Carbofuran 3G at maize whorl.
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			
Tomato	Vegetative	Early blight	<ul style="list-style-type: none"> - Apply Dithane M-45 @ 2gm/ lit of water twice at 7 days interval as a prophylactic measure against early blight. - After 30 days of transplanting apply Urea @ 50-60 kg /sangan as top dressing.
Onion/ Garlic	Bulb formation	leaf minor	<ul style="list-style-type: none"> - During the bulb formation stage, check that the neck portion is not covered with soil. - Light hoeing and irrigation is necessary to keep soil moist during this phase. - Pinch off the flower as soon as it is observed at the base. - Spray Dichlorovos 36 EC @ 0.5ml/lit of water or Monocrotophos 76EC @ 1ml/lit of water to protect the crop from infestation of leaf minor. Spray is to be given twice or thrice at an interval of 7 to 10 days.



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



“Integrated Agromet Advisory Services”

		Purple blach and bulb rot	- Spray Sixer @ 2 gm/lit of water as prophylactic measure against Purple blach and Bulb rot. Spray is to be given twice at an interval of 7 to 10 days.
Fruit Crops	Vegetative		Provide life saving irrigation to passion fruit, pineapple and other fruit crops. Use dry grass or twigs as mulching material at the basin to conserve the soil moisture.
Ginger/ turmeric	Planting		- While preparing land for planting ginger/ turmeric apply 1 t FYM, 65 kg Urea, 375 kg SSP and 80 kg MOP. - Recommended varieties: For turmeric: Megha turmeric For ginger: Nadia - Use healthy mother rhizome of 25-30g weight and plant at a spacing of 1 ft x 1 ft. Treat the seed rhizome with Captan (@ 2g/ lit water) or Mencozeb (@ 3g/ lit of water) for 15-20 minutes and keep under shed before planting.
Citrus	Nursery	Leaf Minor	- Spray Monocrotophos @ 1ml/ lit of water or Cypermethrin @ 2.5 ml/ lit of water against leaf minor in nursery.
French Bean	Sowing to vegetative		- Spacings: for dwarf variety (30x45 cm from seed to seed & row to row) and for pole type at 60x60 cm with 2-3 seeds per hill. - Apply 12-13 kg Urea, 12-15 kg SSP and 40-45 kg MOP per ha at the time of sowing. - Maintain optimum soil moisture.

Animal Sciences

Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
Poultry	All susceptible age groups (as and when required)	Ranikhet disease	1. F-1 Strain first dose within 7 days of age and second dose may be given at 30days for all birds (eye drop/ ocular). 2. R ₂ B vaccine to 8-9 weeks of age group birds (layers) (intra-muscularly @ 0.2 cc/ bird). 3. Killed ND virus vaccine of 16-18 weeks of age group birds (layers) (intra-muscularly).
Sheep/ Goat	Above 3 months of age (as and when required)	FMD	Vaccinate against Foot and mouth disease.
		H.S.	Vaccinate against Haemorrhagic Septicaemia.
		B.Q.	Vaccinate against Black Quarter.
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	- Spray Butox @ 2ml in 1 lit of water, twice a week.
			- Administer Minamil powder @ 15-20g/ day in feed.
Cattle / Buffalo/ Mithun	Above 3 months of age (as and when required)	FMD	Vaccinate against Foot and mouth disease.
		H.S.	Vaccinate against Haemorrhagic Septicaemia.
		B.Q.	Vaccinate against Black Quarter.

(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 March, 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 March, 14 as given below:

Significant past weather for the preceding bi-weekly of Imphal - West (7th to 10th March, 2014)

The sky was mainly clear to partly cloudy but mainly cloudy on 10th and afternoon hours of 7th March. No rainfall was recorded during past four days. Maximum temperature range observed was 24.0 – 29.2 °C, range of minimum temperature observed was 5.0 – 7.0 °C, mean relative humidity observed in morning and afternoon were 84.75 % and 42.75 % respectively. The average wind speed range was 2.4 – 5.0 km/hr.

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

Light rain is predicted on Saturday. Sky may be mainly clear to partly but mainly cloudy on Friday with maximum temp. of 28.0 - 30.0 °C & minimum temp. 8.0 – 11.0 °C. Relative Humidity may reach a maximum of 64 % (maximum RH) & 23 % (minimum RH). The average wind speed may be 5-7 km/hr during next five days.

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
Field Crops			
Pre-kharif Rice	Nursery and main field preparation		<ul style="list-style-type: none"> - Maintained optimum water level in nursery. - If yellowing of leaves of seedlings is observed, spray Chloropyriphos 0.05% @ 2ml/lit water to control plant hopper. - Before first ploughing of main field, apply well decomposed FYM @10-15 t/ha. After a cross plough, irrigate the field to 5-7 cm depth. Submerge soil for 15-20 days before planting to obtain weed free plot. - At the time of final leveling, apply 97 kg Urea, 87Kg DAP and 45 Kg MOP per ha.
Rapeseed/ Mustard	Harvesting to post-harvesting		<ul style="list-style-type: none"> - Make small bundles of the harvest and keep in well ventilated shed in erect position for 3-4 days for better grain filling and better quality seeds. - Dry the harvest for 5-6 days in sun and thresh. Clean the seeds thoroughly and store after proper drying.
Rabi Maize	Vegetative		<ul style="list-style-type: none"> - Irrigate to maintain required soil moisture during this phase. - Earthing-up of rabi maize crop and top dress with nitrogen fertilizer may be done if the plant is knee high.
		Stem borer	<ul style="list-style-type: none"> - To control the infestation of stem borer, apply few granules of Carbofuran 3G at maize whorl.
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			
Tomato	Vegetative	Early blight	<ul style="list-style-type: none"> - Apply Dithane M-45 @ 2gm/ lit of water twice at 7 days interval as a prophylactic measure against early blight. - After 30 days of transplanting apply Urea @ 50-60 kg /sangam as top dressing.
Onion/ Garlic	Bulb formation	leaf minor	<ul style="list-style-type: none"> - During the bulb formation stage, check that the neck portion is not covered with soil. - Light hoeing and irrigation is necessary to keep soil moist during this phase. - Pinch off the flower as soon as it is observed at the base. - Spray Dichlorovos 36 EC @ 0.5ml/lit of water or Monocrotophos 76EC @ 1ml/lit of water to protect the crop from infestation of leaf minor. Spray is to be given twice or thrice at an interval of 7 to 10 days.



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



“Integrated Agromet Advisory Services”

		Purple bloch and bulb rot	- Spray Sixer @ 2 gm/lit of water as prophylactic measure against Purple bloch and Bulb rot. Spray is to be given twice at an interval of 7 to 10 days.
Fruit Crops	Vegetative		Provide life saving irrigation to passion fruit, pineapple and other fruit crops. Use dry grass or twigs as mulching material at the basin to conserve the soil moisture.
Ginger/ turmeric	Planting		- While preparing land for planting ginger/ turmeric apply 1 t FYM, 65 kg Urea, 375 kg SSP and 80 kg MOP. - Recommended varieties: For turmeric: Megha turmeric For ginger: Nadia - Use healthy mother rhizome of 25-30g weight and plant at a spacing of 1 ft x 1 ft. Treat the seed rhizome with Captan (@ 2g/ lit water) or Mencozeb (@ 3g/ lit of water) for 15-20 minutes and keep under shed before planting.
Citrus	Nursery	Leaf Minor	- Spray Monocrotophos @ 1ml/ lit of water or Cypermethrin @ 2.5 ml/ lit of water against leaf minor in nursery.
French Bean	Sowing to vegetative		- Spacings: for dwarf variety (30x45 cm from seed to seed & row to row) and for pole type at 60x60 cm with 2-3 seeds per hill. - Apply 12-13 kg Urea, 12-15 kg SSP and 40-45 kg MOP per ha at the time of sowing. - Maintain optimum soil moisture.

Animal Sciences

Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
Poultry	All susceptible age groups (as and when required)	Ranikhet disease	1. F-1 Strain first dose within 7 days of age and second dose may be given at 30days for all birds (eye drop/ ocular). 2. R ₂ B vaccine to 8-9 weeks of age group birds (layers) (intra-muscularly @ 0.2 cc/ bird). 3. Killed ND virus vaccine of 16-18 weeks of age group birds (layers) (intra-muscularly).
Sheep/ Goat	Above 3 months of age (as and when required)	FMD	Vaccinate against Foot and mouth disease.
		H.S.	Vaccinate against Haemorrhagic Septicaemia.
		B.Q.	Vaccinate against Black Quarter.
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	- Spray Butox @ 2ml in 1 lit of water, twice a week.
			- Administer Minamil powder @ 15-20g/ day in feed.
Cattle / Buffalo/ Mithun	Above 3 months of age (as and when required)	FMD	Vaccinate against Foot and mouth disease.
		H.S.	Vaccinate against Haemorrhagic Septicaemia.
		B.Q.	Vaccinate against Black Quarter.

(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 March, 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 March, 14 as given below:

Significant past weather for the preceding bi-weekly of Imphal - West (7th to 10th March, 2014)

The sky was mainly clear to partly cloudy but mainly cloudy on 10th and afternoon hours of 7th March. No rainfall was recorded during past four days. Maximum temperature range observed was 24.0 – 29.2 °C, range of minimum temperature observed was 5.0 – 7.0 °C, mean relative humidity observed in morning and afternoon were 84.75 % and 42.75 % respectively. The average wind speed range was 2.4 – 5.0 km/hr.

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

Light rain is predicted on Saturday. Sky may be mainly clear to partly but mainly cloudy on Friday with maximum temp. of 27.0 - 29.0 °C & minimum temp. 9.0 – 11.0 °C. Relative Humidity may reach a maximum of 82 % (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
Field Crops			
Pre-kharif Rice	Nursery and main field preparation		<ul style="list-style-type: none"> - Maintained optimum water level in nursery. - If yellowing of leaves of seedlings is observed, spray Chloropyriphos 0.05% @ 2ml/lit water to control plant hopper. - Before first ploughing of main field, apply well decomposed FYM @10-15 t/ha. After a cross plough, irrigate the field to 5-7 cm depth. Submerge soil for 15-20 days before planting to obtain weed free plot. - At the time of final leveling, apply 97 kg Urea, 87Kg DAP and 45 Kg MOP per ha.
Rapeseed/ Mustard	Harvesting to post-harvesting		<ul style="list-style-type: none"> - Make small bundles of the harvest and keep in well ventilated shed in erect position for 3-4 days for better grain filling and better quality seeds. - Dry the harvest for 5-6 days in sun and thresh. Clean the seeds thoroughly and store after proper drying.
Rabi Maize	Vegetative		<ul style="list-style-type: none"> - Irrigate to maintain required soil moisture during this phase. - Earthing-up of rabi maize crop and top dress with nitrogen fertilizer may be done if the plant is knee high.
		Stem borer	<ul style="list-style-type: none"> - To control the infestation of stem borer, apply few granules of Carbofuran 3G at maize whorl.
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			
Tomato	Vegetative	Early blight	<ul style="list-style-type: none"> - Apply Dithane M-45 @ 2gm/ lit of water twice at 7 days interval as a prophylactic measure against early blight. - After 30 days of transplanting apply Urea @ 50-60 kg /sangan as top dressing.
Onion/ Garlic	Bulb formation	leaf minor	<ul style="list-style-type: none"> - During the bulb formation stage, check that the neck portion is not covered with soil. - Light hoeing and irrigation is necessary to keep soil moist during this phase. - Pinch off the flower as soon as it is observed at the base. - Spray Dichlorovos 36 EC @ 0.5ml/lit of water or Monocrotophos 76EC @ 1ml/lit of water to protect the crop from infestation of leaf minor. Spray is to be given twice or thrice at an interval of 7 to 10 days.



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



“Integrated Agromet Advisory Services”

		Purple bloch and bulb rot	- Spray Sixer @ 2 gm/lit of water as prophylactic measure against Purple bloch and Bulb rot. Spray is to be given twice at an interval of 7 to 10 days.
Fruit Crops	Vegetative		Provide life saving irrigation to passion fruit, pineapple and other fruit crops. Use dry grass or twigs as mulching material at the basin to conserve the soil moisture.
Ginger/ turmeric	Planting		- While preparing land for planting ginger/ turmeric apply 1 t FYM, 65 kg Urea, 375 kg SSP and 80 kg MOP. - Recommended varieties: For turmeric: Megha turmeric For ginger: Nadia - Use healthy mother rhizome of 25-30g weight and plant at a spacing of 1 ft x 1 ft. Treat the seed rhizome with Captan (@ 2g/ lit water) or Mencozeb (@ 3g/ lit of water) for 15-20 minutes and keep under shed before planting.
Citrus	Nursery	Leaf Minor	- Spray Monocrotophos @ 1ml/ lit of water or Cypermethrin @ 2.5 ml/ lit of water against leaf minor in nursery.
French Bean	Sowing to vegetative		- Spacings: for dwarf variety (30x45 cm from seed to seed & row to row) and for pole type at 60x60 cm with 2-3 seeds per hill. - Apply 12-13 kg Urea, 12-15 kg SSP and 40-45 kg MOP per ha at the time of sowing. - Maintain optimum soil moisture.

Animal Sciences

Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
Poultry	All susceptible age groups (as and when required)	Ranikhet disease	1. F-1 Strain first dose within 7 days of age and second dose may be given at 30days for all birds (eye drop/ ocular). 2. R ₂ B vaccine to 8-9 weeks of age group birds (layers) (intra-muscularly @ 0.2 cc/ bird). 3. Killed ND virus vaccine of 16-18 weeks of age group birds (layers) (intra-muscularly).
Sheep/ Goat	Above 3 months of age (as and when required)	FMD	Vaccinate against Foot and mouth disease.
		H.S.	Vaccinate against Haemorrhagic Septicaemia.
		B.Q.	Vaccinate against Black Quarter.
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	- Spray Butox @ 2ml in 1 lit of water, twice a week.
			- Administer Minamil powder @ 15-20g/ day in feed.
Cattle / Buffalo/ Mithun	Above 3 months of age (as and when required)	FMD	Vaccinate against Foot and mouth disease.
		H.S.	Vaccinate against Haemorrhagic Septicaemia.
		B.Q.	Vaccinate against Black Quarter.

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