



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



“Integrated Agromet Advisory Services”

MANIPUR BULLETIN

7th 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 8th to 12th March, 14 as given below:

Significant past weather for the preceding bi-weekly of Imphal - West (4th to 6th March, 2014)

The sky was mainly cloudy to cloudy during 4th to 5th morning hours and mainly clear to partly cloudy from afternoon hours of 5th to 6th March. No rainfall was recorded during past three days. Maximum temperature range observed was 25.2 – 28.7 °C, range of minimum temperature observed was 8.5 – 13.2 °C, mean relative humidity observed in morning and afternoon were 83.3 % and 41.3 % respectively. The average wind speed range was 1.5 – 5.4 km/hr.

Weather forecast for next five days of Churachandpur (8th to 12th March, 2014)

No rain is predicted upto Wednesday. Sky may be mainly clear but partly to mainly cloudy on Tuesday with maximum temp. of 26.0 °C & minimum temp. 8.0 - 9.0 °C. Relative Humidity may reach a maximum of 84 % (maximum RH) & 21 % (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"> - After 7-10 days of sowing, apply 10 kg Urea and 3.5 kg MOP per 700m² as top dressing along with 2 kg Carbofuran (3G) and spray 40 g of Carbendazim 50% WP in 40 litres of water. - 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 (2-3) inches depth. Submerge soil for 15-20 days before planting to obtain weed free plot.
Rapeseed/ Mustard	Maturity to harvesting		<ul style="list-style-type: none"> - Crop may be harvested when 75% of the siliquae mature. The crop should be harvested in the morning before drying of morning dew to avoid shattering of pods. - 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.
Pulses (Pea & Lentil)	Maturity to harvesting		<ul style="list-style-type: none"> - Retain healthy pods of selected plants for seeds. - Harvest mature pods.
Rabi Maize	Vegetative		<ul style="list-style-type: none"> - 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.
Horticulture Crops			
Ginger/ turmeric	Planting		<ul style="list-style-type: none"> - 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.
Tomato/ Brinjal	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.



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Potato	Maturity	Late blight	If incidence of late blight may be observed with the rains, it is advised to spray Metalaxyl based fungicide, like Redomil MZ-72 WP @ 2 gm/lit alternately with Mencozeb @ 2gm/lit of water at 14 days interval for 2-3 times.
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		- Spacings: for dwarf variety like Anupama (30x45 cm from seed to seed & row to row) and for pole type Local variety (Tangkhu hawai) 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.
Onion/ Garlic	Bulb formation		- 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.

Animal Sciences

Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
Poultry	All susceptible age groups (as and when required)	Coccidiosis	Give supercox @ 1g/lit of water + 150gm of glucose and vitamin K for 5-7 days.
		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).
		Deworming	Deworming may be done using Piperazine Citrate @ 50 ml in drinking water for 100 birds.
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.
		Endoparasite	- Administer Minthal bolus @ 1 bolus/ 40 kg b.wt. accompanied by Livozyme @ 10 ml twice daily.
			- 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



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“Integrated Agromet Advisory Services”

MANIPUR BULLETIN

7th 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 8th to 12th March, 14 as given below:

Significant past weather for the preceding bi-weekly of Imphal - West (4th to 6th March, 2014)

The sky was mainly cloudy to cloudy during 4th to 5th morning hours and mainly clear to partly cloudy from afternoon hours of 5th to 6th March. No rainfall was recorded during past three days. Maximum temperature range observed was 25.2 – 28.7 °C, range of minimum temperature observed was 8.5 – 13.2 °C, mean relative humidity observed in morning and afternoon were 83.3 % and 41.3 % respectively. The average wind speed range was 1.5 – 5.4 km/hr.

Weather forecast for next five days of Imphal - East (8th to 12th March, 2014)

No rain is predicted upto Wednesday. Sky may be mainly clear but partly to mainly cloudy on Tuesday with maximum temp. of 27.0 – 28.0 °C & minimum temp. 8.0 – 9.0 °C. Relative Humidity may reach a maximum of 87 % (maximum RH) & 19 % (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"> - After 7-10 days of sowing, apply 10 kg Urea and 3.5 kg MOP per 700m² as top dressing along with 2 kg Carbofuran (3G) and spray 40 g of Carbazim 50% WP in 40 litres of water. - 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 (2-3) inches depth. Submerge soil for 15-20 days before planting to obtain weed free plot.
Rapeseed/ Mustard	Maturity to harvesting		<ul style="list-style-type: none"> - Crop may be harvested when 75% of the siliquae mature. The crop should be harvested in the morning before drying of morning dew to avoid shattering of pods. - 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.
Pulses (Pea & Lentil)	Maturity to harvesting		<ul style="list-style-type: none"> - Retain healthy pods of selected plants for seeds. - Harvest mature pods.
Rabi Maize	Vegetative		<ul style="list-style-type: none"> - 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.
Horticulture Crops			
Ginger/ turmeric	Planting		<ul style="list-style-type: none"> - 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.
Tomato/ Brinjal	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.



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Potato	Maturity	Late blight	If incidence of late blight may be observed with the rains, it is advised to spray Metalaxyl based fungicide, like Redomil MZ-72 WP @ 2 gm/lit alternately with Mencozeb @ 2gm/lit of water at 14 days interval for 2-3 times.
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		- Spacings: for dwarf variety like Anupama (30x45 cm from seed to seed & row to row) and for pole type Local variety (Tangkhu hawai) 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.
Onion/ Garlic	Bulb formation		- 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.

Animal Sciences

Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
Poultry	All susceptible age groups (as and when required)	Coccidiosis	Give supercox @ 1g/lit of water + 150gm of glucose and vitamin K for 5-7 days.
		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).
		Deworming	Deworming may be done using Piperazine Citrate @ 50 ml in drinking water for 100 birds.
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.
		Endoparasite	- Administer Minthal bolus @ 1 bolus/ 40 kg b.wt. accompanied by Livozyme @ 10 ml twice daily.
			- 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



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“Integrated Agromet Advisory Services”

MANIPUR BULLETIN

7th 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 8th to 12th March, 14 as given below:

Significant past weather for the preceding bi-weekly of Imphal - West (4th to 6th March, 2014)

The sky was mainly cloudy to cloudy during 4th to 5th morning hours and mainly clear to partly cloudy from afternoon hours of 5th to 6th March. No rainfall was recorded during past three days. Maximum temperature range observed was 25.2 – 28.7 °C, range of minimum temperature observed was 8.5 – 13.2 °C, mean relative humidity observed in morning and afternoon were 83.3 % and 41.3 % respectively. The average wind speed range was 1.5 – 5.4 km/hr.

Weather forecast for next five days of Imphal - West (8th to 12th March, 2014)

No rain is predicted upto Wednesday. Sky may be mainly clear but partly to mainly cloudy on Tuesday with maximum temp. of 27.0 °C & minimum temp. 8.0 – 9.0 °C. Relative Humidity may reach a maximum of 87 % (maximum RH) & 19 % (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"> - After 7-10 days of sowing, apply 10 kg Urea and 3.5 kg MOP per 700m² as top dressing along with 2 kg Carbofuran (3G) and spray 40 g of Carbendazim 50% WP in 40 litres of water. - 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 (2-3) inches depth. Submerge soil for 15-20 days before planting to obtain weed free plot.
Rapeseed/ Mustard	Maturity to harvesting		<ul style="list-style-type: none"> - Crop may be harvested when 75% of the siliquae mature. The crop should be harvested in the morning before drying of morning dew to avoid shattering of pods. - 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.
Pulses (Pea & Lentil)	Maturity to harvesting		<ul style="list-style-type: none"> - Retain healthy pods of selected plants for seeds. - Harvest mature pods.
Rabi Maize	Vegetative		<ul style="list-style-type: none"> - 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.
Horticulture Crops			
Ginger/ turmeric	Planting		<ul style="list-style-type: none"> - 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.
Tomato/ Brinjal	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.



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“Integrated Agromet Advisory Services”

Potato	Maturity	Late blight	If incidence of late blight may be observed with the rains, it is advised to spray Metalaxyl based fungicide, like Redomil MZ-72 WP @ 2 gm/lit alternately with Mencozeb @ 2gm/lit of water at 14 days interval for 2-3 times.
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		- Spacings: for dwarf variety like Anupama (30x45 cm from seed to seed & row to row) and for pole type Local variety (Tangkhu hawai) 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.
Onion/ Garlic	Bulb formation		- 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.

Animal Sciences

Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
Poultry	All susceptible age groups (as and when required)	Coccidiosis	Give supercox @ 1g/lit of water + 150gm of glucose and vitamin K for 5-7 days.
		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).
		Deworming	Deworming may be done using Piperazine Citrate @ 50 ml in drinking water for 100 birds.
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.
		Endoparasite	- Administer Minthal bolus @ 1 bolus/ 40 kg b.wt. accompanied by Livozyme @ 10 ml twice daily.
			- 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



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“Integrated Agromet Advisory Services”

MANIPUR BULLETIN

7th 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 8th to 12th March, 14 as given below:

Significant past weather for the preceding bi-weekly of Imphal - West (4th to 6th March, 2014)

The sky was mainly cloudy to cloudy during 4th to 5th morning hours and mainly clear to partly cloudy from afternoon hours of 5th to 6th March. No rainfall was recorded during past three days. Maximum temperature range observed was 25.2 – 28.7 °C, range of minimum temperature observed was 8.5 – 13.2 °C, mean relative humidity observed in morning and afternoon were 83.3 % and 41.3 % respectively. The average wind speed range was 1.5 – 5.4 km/hr.

Weather forecast for next five days of Senapati (8th to 12th March, 2014)

No rain is predicted upto Wednesday. Sky may be mainly clear but partly to mainly cloudy on Tuesday with maximum temp. of 23.0 - 24.0 °C & minimum temp. 7.0 - 8.0 °C. Relative Humidity may reach a maximum of 82 % (maximum RH) & 20 % (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"> - After 7-10 days of sowing, apply 10 kg Urea and 3.5 kg MOP per 700m² as top dressing along with 2 kg Carbofuran (3G) and spray 40 g of Carbazim 50% WP in 40 litres of water. - 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 (2-3) inches depth. Submerge soil for 15-20 days before planting to obtain weed free plot.
Rapeseed/ Mustard	Maturity to harvesting		<ul style="list-style-type: none"> - Crop may be harvested when 75% of the siliquae mature. The crop should be harvested in the morning before drying of morning dew to avoid shattering of pods. - 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.
Pulses (Pea & Lentil)	Maturity to harvesting		<ul style="list-style-type: none"> - Retain healthy pods of selected plants for seeds. - Harvest mature pods.
Rabi Maize	Vegetative		<ul style="list-style-type: none"> - 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.
Horticulture Crops			
Ginger/ turmeric	Planting		<ul style="list-style-type: none"> - 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.
Tomato/ Brinjal	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.



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“Integrated Agromet Advisory Services”

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		- Spacings: for dwarf variety like Anupama (30x45 cm from seed to seed & row to row) and for pole type Local variety (Tangkhul hawaii) 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.
Onion/ Garlic	Bulb formation		- 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.

Animal Sciences

Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
Poultry	All susceptible age groups (as and when required)	Coccidiosis	Give supercox @ 1g/lit of water + 150gm of glucose and vitamin K for 5-7 days.
		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).
		Deworming	Deworming may be done using Piperazine Citrate @ 50 ml in drinking water for 100 birds.
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.
		Endoparasite	- Administer Minthal bolus @ 1 bolus/ 40 kg b.wt. accompanied by Livozyme @ 10 ml twice daily.
			- 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



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“Integrated Agromet Advisory Services”

MANIPUR BULLETIN

7th 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 8th to 12th March, 14 as given below:

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Weather forecast for next five days of Tamenglong (8th to 12th March, 2014)

No rain is predicted upto Wednesday. Sky may be mainly clear but partly to mainly cloudy on Tuesday with maximum temp. of 24.0 °C & minimum temp. 7.0 - 8.0 °C. Relative Humidity may reach a maximum of 86 % (maximum RH) & 20 % (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
Field Crops			
Pre-kharif Rice	Nursery and main field preparation		<ul style="list-style-type: none"> - After 7-10 days of sowing, apply 10 kg Urea and 3.5 kg MOP per 700m² as top dressing along with 2 kg Carbofuran (3G) and spray 40 g of Carbendazim 50% WP in 40 litres of water. - If yellowing of leaves of seedlings is observed, spray Chloropyrifos 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 (2-3) inches depth. Submerge soil for 15-20 days before planting to obtain weed free plot.
Rapeseed/ Mustard	Maturity to harvesting		<ul style="list-style-type: none"> - Crop may be harvested when 75% of the siliquae mature. The crop should be harvested in the morning before drying of morning dew to avoid shattering of pods. - 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.
Pulses (Pea & Lentil)	Maturity to harvesting		<ul style="list-style-type: none"> - Retain healthy pods of selected plants for seeds. - Harvest mature pods.
Rabi Maize	Vegetative		<ul style="list-style-type: none"> - 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.
Horticulture Crops			
Ginger/ turmeric	Planting		<ul style="list-style-type: none"> - 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.
Tomato/ Brinjal	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.



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



“Integrated Agromet Advisory Services”

Potato	Maturity	Late blight	If incidence of late blight may be observed with the rains, it is advised to spray Metalaxyl based fungicide, like Redomil MZ-72 WP @ 2 gm/lit alternately with Mencozeb @ 2gm/lit of water at 14 days interval for 2-3 times.
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		- Spacings: for dwarf variety like Anupama (30x45 cm from seed to seed & row to row) and for pole type Local variety (Tangkhu hawai) 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.
Onion/ Garlic	Bulb formation		- 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.

Animal Sciences

Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
Poultry	All susceptible age groups (as and when required)	Coccidiosis	Give supercox @ 1g/lit of water + 150gm of glucose and vitamin K for 5-7 days.
		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).
		Deworming	Deworming may be done using Piperazine Citrate @ 50 ml in drinking water for 100 birds.
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.
		Endoparasite	- Administer Minthal bolus @ 1 bolus/ 40 kg b.wt. accompanied by Livozyme @ 10 ml twice daily.
			- 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)
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**ICAR Research Complex for N.E.H. Region
Manipur Centre, Lamphelpat, Imphal - 795 004**



“Integrated Agromet Advisory Services”

MANIPUR BULLETIN

7th 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 8th to 12th March, 14 as given below:

Significant past weather for the preceding bi-weekly of Imphal - West (4th to 6th March, 2014)

The sky was mainly cloudy to cloudy during 4th to 5th morning hours and mainly clear to partly cloudy from afternoon hours of 5th to 6th March. No rainfall was recorded during past three days. Maximum temperature range observed was 25.2 – 28.7 °C, range of minimum temperature observed was 8.5 – 13.2 °C, mean relative humidity observed in morning and afternoon were 83.3 % and 41.3 % respectively. The average wind speed range was 1.5 – 5.4 km/hr.

Weather forecast for next five days of Thoubal (8th to 12th March, 2014)

No rain is predicted upto Wednesday. Sky may be mainly clear but partly to mainly cloudy on Tuesday with maximum temp. of 25.0 – 26.0 °C & minimum temp. 8.0 – 9.0 °C. Relative Humidity may reach a maximum of 72 % (maximum RH) & 20 % (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"> - After 7-10 days of sowing, apply 10 kg Urea and 3.5 kg MOP per 700m² as top dressing along with 2 kg Carbofuran (3G) and spray 40 g of Carbazim 50% WP in 40 litres of water. - 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 (2-3) inches depth. Submerge soil for 15-20 days before planting to obtain weed free plot.
Rapeseed/ Mustard	Maturity to harvesting		<ul style="list-style-type: none"> - Crop may be harvested when 75% of the siliquae mature. The crop should be harvested in the morning before drying of morning dew to avoid shattering of pods. - 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.
Pulses (Pea & Lentil)	Maturity to harvesting		<ul style="list-style-type: none"> - Retain healthy pods of selected plants for seeds. - Harvest mature pods.
Rabi Maize	Vegetative		<ul style="list-style-type: none"> - 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.
Horticulture Crops			
Ginger/ turmeric	Planting		<ul style="list-style-type: none"> - 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.
Tomato/ Brinjal	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.



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

Potato	Maturity	Late blight	If incidence of late blight may be observed with the rains, it is advised to spray Metalaxyl based fungicide, like Redomil MZ-72 WP @ 2 gm/lit alternately with Mencozeb @ 2gm/lit of water at 14 days interval for 2-3 times.
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		- Spacings: for dwarf variety like Anupama (30x45 cm from seed to seed & row to row) and for pole type Local variety (Tangkhu hawai) 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.
Onion/ Garlic	Bulb formation		- 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.

Animal Sciences

Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
Poultry	All susceptible age groups (as and when required)	Coccidiosis	Give supercox @ 1g/lit of water + 150gm of glucose and vitamin K for 5-7 days.
		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).
		Deworming	Deworming may be done using Piperazine Citrate @ 50 ml in drinking water for 100 birds.
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.
		Endoparasite	- Administer Minthal bolus @ 1 bolus/ 40 kg b.wt. accompanied by Livozyme @ 10 ml twice daily.
			- 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.

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Scientist i/c, GKMS



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



“Integrated Agromet Advisory Services”

MANIPUR BULLETIN

7th 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 8th to 12th March, 14 as given below:

Significant past weather for the preceding bi-weekly of Imphal - West (4th to 6th March, 2014)

The sky was mainly cloudy to cloudy during 4th to 5th morning hours and mainly clear to partly cloudy from afternoon hours of 5th to 6th March. No rainfall was recorded during past three days. Maximum temperature range observed was 25.2 – 28.7 °C, range of minimum temperature observed was 8.5 – 13.2 °C, mean relative humidity observed in morning and afternoon were 83.3 % and 41.3 % respectively. The average wind speed range was 1.5 – 5.4 km/hr.

Weather forecast for next five days of Ukhrul (8th to 12th March, 2014)

No rain is predicted upto Wednesday. Sky may be mainly clear but partly to mainly cloudy on Tuesday with maximum temp. of 23.0 °C & minimum temp. 7.0 °C. Relative Humidity may reach a maximum of 66 % (maximum RH) & 21 % (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"> - After 7-10 days of sowing, apply 10 kg Urea and 3.5 kg MOP per 700m² as top dressing along with 2 kg Carbofuran (3G) and spray 40 g of Carbendazim 50% WP in 40 litres of water. - If yellowing of leaves of seedlings is observed, spray Chloropyrifos 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 (2-3) inches depth. Submerge soil for 15-20 days before planting to obtain weed free plot.
Rapeseed/ Mustard	Maturity to harvesting		<ul style="list-style-type: none"> - Crop may be harvested when 75% of the siliquae mature. The crop should be harvested in the morning before drying of morning dew to avoid shattering of pods. - 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.
Pulses (Pea & Lentil)	Maturity to harvesting		<ul style="list-style-type: none"> - Retain healthy pods of selected plants for seeds. - Harvest mature pods.
Rabi Maize	Vegetative		<ul style="list-style-type: none"> - 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.
Horticulture Crops			
Ginger/ turmeric	Planting		<ul style="list-style-type: none"> - 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.
Tomato/ Brinjal	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.



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



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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		- Spacings: for dwarf variety like Anupama (30x45 cm from seed to seed & row to row) and for pole type Local variety (Tangkhul hawaii) 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.
Onion/ Garlic	Bulb formation		- 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.

Animal Sciences

Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
Poultry	All susceptible age groups (as and when required)	Coccidiosis	Give supercox @ 1g/lit of water + 150gm of glucose and vitamin K for 5-7 days.
		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).
		Deworming	Deworming may be done using Piperazine Citrate @ 50 ml in drinking water for 100 birds.
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.
		Endoparasite	- Administer Minthal bolus @ 1 bolus/ 40 kg b.wt. accompanied by Livozyme @ 10 ml twice daily.
			- 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

7th 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 8th to 12th March, 14 as given below:

Significant past weather for the preceding bi-weekly of Imphal - West (4th to 6th March, 2014)

The sky was mainly cloudy to cloudy during 4th to 5th morning hours and mainly clear to partly cloudy from afternoon hours of 5th to 6th March. No rainfall was recorded during past three days. Maximum temperature range observed was 25.2 – 28.7 °C, range of minimum temperature observed was 8.5 – 13.2 °C, mean relative humidity observed in morning and afternoon were 83.3 % and 41.3 % respectively. The average wind speed range was 1.5 – 5.4 km/hr.

Weather forecast for next five days of Bishnupur (8th to 12th March, 2014)

No rain is predicted upto Wednesday. Sky may be mainly clear but partly to mainly cloudy on Tuesday with maximum temp. of 28.0 °C & minimum temp. 10.0 °C. Relative Humidity may reach a maximum of 78 % (maximum RH) & 20 % (minimum RH). The average wind speed may be 4 km/hr during next five days.

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
Field Crops			
Pre-kharif Rice	Nursery and main field preparation		<ul style="list-style-type: none"> - After 7-10 days of sowing, apply 10 kg Urea and 3.5 kg MOP per 700m² as top dressing along with 2 kg Carbofuran (3G) and spray 40 g of Carbendazim 50% WP in 40 litres of water. - 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 (2-3) inches depth. Submerge soil for 15-20 days before planting to obtain weed free plot.
Rapeseed/ Mustard	Maturity to harvesting		<ul style="list-style-type: none"> - Crop may be harvested when 75% of the siliquae mature. The crop should be harvested in the morning before drying of morning dew to avoid shattering of pods. - 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.
Pulses (Pea & Lentil)	Maturity to harvesting		<ul style="list-style-type: none"> - Retain healthy pods of selected plants for seeds. - Harvest mature pods.
Rabi Maize	Vegetative		<ul style="list-style-type: none"> - 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.
Horticulture Crops			
Ginger/ turmeric	Planting		<ul style="list-style-type: none"> - 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.
Tomato/ Brinjal	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.



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



“Integrated Agromet Advisory Services”

Potato	Maturity	Late blight	If incidence of late blight may be observed with the rains, it is advised to spray Metalaxyl based fungicide, like Redomil MZ-72 WP @ 2 gm/lit alternately with Mencozeb @ 2gm/lit of water at 14 days interval for 2-3 times.
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		- Spacings: for dwarf variety like Anupama (30x45 cm from seed to seed & row to row) and for pole type Local variety (Tangkhu hawai) 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.
Onion/ Garlic	Bulb formation		- 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.

Animal Sciences

Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
Poultry	All susceptible age groups (as and when required)	Coccidiosis	Give supercox @ 1g/lit of water + 150gm of glucose and vitamin K for 5-7 days.
		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).
		Deworming	Deworming may be done using Piperazine Citrate @ 50 ml in drinking water for 100 birds.
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.
		Endoparasite	- Administer Minthal bolus @ 1 bolus/ 40 kg b.wt. accompanied by Livozyme @ 10 ml twice daily.
			- 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

7th 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 8th to 12th March, 14 as given below:

Significant past weather for the preceding bi-weekly of Imphal - West (4th to 6th March, 2014)

The sky was mainly cloudy to cloudy during 4th to 5th morning hours and mainly clear to partly cloudy from afternoon hours of 5th to 6th March. No rainfall was recorded during past three days. Maximum temperature range observed was 25.2 – 28.7 °C, range of minimum temperature observed was 8.5 – 13.2 °C, mean relative humidity observed in morning and afternoon were 83.3 % and 41.3 % respectively. The average wind speed range was 1.5 – 5.4 km/hr.

Weather forecast for next five days of Chandel (8th to 12th March, 2014)

No rain is predicted upto Wednesday. Sky may be mainly clear but partly to mainly cloudy on Tuesday with maximum temp. of 25.0 – 26.0 °C & minimum temp. 9.0 °C. Relative Humidity may reach a maximum of 61 % (maximum RH) & 21 % (minimum RH). The average wind speed may be 5-6 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"> - After 7-10 days of sowing, apply 10 kg Urea and 3.5 kg MOP per 700m² as top dressing along with 2 kg Carbofuran (3G) and spray 40 g of Carbendazim 50% WP in 40 litres of water. - 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 (2-3) inches depth. Submerge soil for 15-20 days before planting to obtain weed free plot.
Rapeseed/ Mustard	Maturity to harvesting		<ul style="list-style-type: none"> - Crop may be harvested when 75% of the siliquae mature. The crop should be harvested in the morning before drying of morning dew to avoid shattering of pods. - 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.
Pulses (Pea & Lentil)	Maturity to harvesting		<ul style="list-style-type: none"> - Retain healthy pods of selected plants for seeds. - Harvest mature pods.
Rabi Maize	Vegetative		<ul style="list-style-type: none"> - 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.
Horticulture Crops			
Ginger/ turmeric	Planting		<ul style="list-style-type: none"> - 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.
Tomato/ Brinjal	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.



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Manipur Centre, Lamphelpat, Imphal - 795 004**



“Integrated Agromet Advisory Services”

Potato	Maturity	Late blight	If incidence of late blight may be observed with the rains, it is advised to spray Metalaxyl based fungicide, like Redomil MZ-72 WP @ 2 gm/lit alternately with Mencozeb @ 2gm/lit of water at 14 days interval for 2-3 times.
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		- Spacings: for dwarf variety like Anupama (30x45 cm from seed to seed & row to row) and for pole type Local variety (Tangkhu hawai) 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.
Onion/ Garlic	Bulb formation		- 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.

Animal Sciences

Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
Poultry	All susceptible age groups (as and when required)	Coccidiosis	Give supercox @ 1g/lit of water + 150gm of glucose and vitamin K for 5-7 days.
		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).
		Deworming	Deworming may be done using Piperazine Citrate @ 50 ml in drinking water for 100 birds.
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.
		Endoparasite	- Administer Minthal bolus @ 1 bolus/ 40 kg b.wt. accompanied by Livozyme @ 10 ml twice daily.
			- 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.

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