



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



“Gramin Krishi Mausam Seva”

MANIPUR BULLETIN

8th March, 2016

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 9th to 13th March, 2016 as below:

<p>Significant past weather for the preceding bi-weekly of Imphal - West (4th to 7th March, 2016)</p> <p>The sky was mainly Clear to partly cloudy. The Rainfall 2.4 mm was recorded during past four days. Maximum temperature range observed was 26.4 – 28.5 °C, range of minimum temperature observed was 11.0 – 13.0 °C, mean relative humidity observed in morning and afternoon were 92 % and 47 % respectively. The average wind speed range was 4.1 – 11.1 km/hr.</p>	<p>Weather forecast for next five days of Ukhrul (9th to 13th March, 2016)</p> <p>Light rains likely during the next five days. The sky will remain mainly clear to fair sky, with maximum temp. of 29.0 – 32.0 °C & minimum temp. 13.0 – 14.0 °C. Relative humidity may reach upto 82% (max RH) & 21 % (min RH). The average wind speed may be 3-4 km/hr. Wind direction may be South south Westerly to North west Westerly during next five days.</p>
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Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Field Crops			
Rapeseed/ Mustard	Flowering		- If flowering has started, then four bee boxes may be kept for one hectare crop area. Avoid spray of insecticides in such area.
Field Pea/ Lentil	Vegetative	Powdery Mildew	- Spray Bayleton (Triademofon 25%WP) @ 7.5 g/ pump (15litre capacity) or Dinocap (Karathane 46% EC) @ 7.5ml/ pump.
		Aphid	- Spray Cypermethrin @2ml/lit of water or Nuvan @ 0.5ml/ lit of water against aphid. - For organic control against aphid, sprays that consist of Azadirachtin/ neem oil or pyrethrin may be used.
Horticulture Crops			
French bean	Land preparation		-Land preparation for sowing of French bean should be started. -Quality seed should be collected. -Seed treatment against soil born diseases is advised preferably Trichoderma harzianum @ 10gm/kg seed is recommended. -Seed rate for dwarf variety are 50-60 kg/ha at 10X30 cm spacing and 30-40 kg at 30X45 cm spacing for pole type.
Okra/bhindi	Land preparation		-land preparation for sowing of Bhindi should be started.
Tomato	Top dressing and earthing up		-40-45 days old tomato should be top dressed with 25 kg urea followed by earthing up.
Cucurbits (bottle gourd, sponge gourd, pumpkin, water melon, etc.)	Offseason		-Prepare field into fine tilt and exposed to the sun for 7-10 days to avoid multiplication of mycelium for powdery mildew. - Spray Bayleton (Triademofon 25%WP) @ 7.5 g/ pump (15litre capacity) or Ntivo (Tebuconazole 50% + Trifloxystrobin 25% W. G) at the same dose. - Transplant seedlings of 4-stage leaves at warm temperature.
Onion	Vegetative		- Sufficient water should be made available for proper vegetative growth as it will result in poor bulb formation. - If availability of water is a problem mulching material free from fungal diseases may also be used. - Neck portion in plant should not be covered with soil
Potato	For seed		- Try to minimize aphid population, if it is more than 2/100 compound leaves. Spray Imidachlorpid (Confidor) @ 4gm/litre of water. 100gm/250 litre of water is sufficient for 1 sangam. Repeat the spray at 10-15 days. - remove off type plants showing mottling, mosaic, wrinkle and leaf rolling symptom. - Cut the haulm at ground level in Jan/Feb, in the valley. Ensure no regrowth of the stem. - Harvest the crop when the skin of the tuber has become firm. - Harvest should be done on sunny day only. Heap the produce in the shade for curing of skin and left undisturbed for 15-20 days.
Animal Sciences			
Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
Poultry (Chicken/ Turkey/ Duck)	All age groups	Care & management	- To protect birds of all age groups from inclement weather, there should be adequate arrangements for artificial lighting and heating.



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			- Needed to increase energy giving ingredients of feed (i.e. Maize, Wheat, Bajra etc.) and can be added 5% more.
		Ranikhet Diseases	Birds must be vaccinated as per recommended schedule mentioned below as the probability of occurrence of the disease is high during March- April months. 1. F-1 Strain may be first administered within 7 days of age and second dose may be given at 30days for all birds. 2. R ₂ B vaccine of 8-9 weeks of age group birds (layers). 3. Killed ND virus vaccine of 16-18 weeks of age group birds (layers). After that at every two months interval.
Sheep/ Goat	All age groups excepts the young ones	PPR (Peste Des Petits Ruminants)	- If the animals have not yet been vaccinated, give vaccine now for PPR (Peste Des Petits Ruminants).
		Enterotoxemia	- If the Lambs and Kids in particular should be given the vaccination to prevent Enterotoxaemia.
		Ectoparasitism	- Keep the sheds clean. Hang Bouquets of Basil (Ocimum sanctum) or Lemon Grass (Cymbopogon citrates) in the animals sheds to keep away the ecto-parasites. Neem oil based disinfectants can be sprayed. Butox solution (2 C.C. in 1 litre of water) can also be used.
Pig	All age groups excepts the young ones	Care & management for newly born one	-Artificial lighting and heating to the piglets. -Provide adequate bedding materials.
		Deworming	-Give Morantel citrate tablet @ 15 mg/kg of body weight.
		Ectoparasitism	- Keep the sheds clean. Hang Bouquets of Basil (Ocimum sanctum) or Lemon Grass (Cymbopogon citrates) in the animals sheds to keep away the ecto-parasites. Neem oil based disinfectants can be sprayed. Butox solution (2 C.C. in 1 litre of water) can also be used.
		Hog Cholera	-Vaccination against swine fever must be carried out.
Cattle	All age groups excepts the young ones	B.Q./ H.S/FMD	-If the animals have not yet been vaccinated, give vaccine, now for Black Quarter, Haemorrhagic septicaemia, Foot & mouth Disease.
		Ectoparasitism	- Keep the sheds clean. Hang Bouquets of Basil (Ocimum sanctum) or Lemon Grass (Cymbopogon citrates) in the animals sheds to keep away the ecto-parasites. Neem oil based disinfectants can be sprayed. Butox solution (2 C.C. in 1 litre of water) can also be used.
		Johnes disease & Sterility	Immediate proper treatment for the disease should be provided.
		Fodder crops	-Maize should be sown for use as green fodder. -Napier/Guinea grass may be transplanted. -Silage can be prepared.
		Puerperal Fever in Pregnant animals	-50-60 gram of mineral mixture every day.
		Decrease in milk production	-The milk & urine samples must be sent for testing.
	Breedable age group	Controlled breeding	-control breeding programme for animals should continue in the month of February so the all participating animals become pregnant during this month.
	Milch cow	Mastitis	-To prevent mastitis they should be milked completely.
Fishery:			
Type of Farming	Stage	Management	Agro-metrological advisories
Carp culture	Fries/ fingerlings/ brooders	Pond and water	-Maintain minimum depth of 1.5 – 2.0 m by filling fresh and clean water. -Apply Agri-Lime in brooder pond at small quantity at an interval of 30 days regularly.
		Feed	Provide feed 1-2 times @ 2 % body weight per day.
		Fish	- Male and female brooders should be stock in separate ponds for early breeding programs for Common Carp. - Harvesting of fish may be done in area where water availability is low.

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



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MANIPUR BULLETIN

8th March, 2016

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 9th to 13th March, 2016 as below:

<p>Significant past weather for the preceding bi-weekly of Imphal - West (4th to 7th March, 2016)</p> <p>The sky was mainly Clear to partly cloudy. The Rainfall 2.4 mm was recorded during past four days. Maximum temperature range observed was 26.4 – 28.5 °C, range of minimum temperature observed was 11.0 – 13.0 °C, mean relative humidity observed in morning and afternoon were 92 % and 47 % respectively. The average wind speed range was 4.1 – 11.1 km/hr.</p>	<p>Weather forecast for next five days of Bishnupur (9th to 13th March, 2016)</p> <p>Light rains likely during the next five days. The sky will remain mainly clear to fair sky, with maximum temp. of 29.0 – 31.0 °C & minimum temp. 13.0 – 14.0 °C. Relative humidity may reach upto 81% (max RH) & 19 % (min RH). The average wind speed may be 3-4 km/hr. Wind direction may be South south Westerly to South Westerly during next five days.</p>
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Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Field Crops			
Rapeseed/ Mustard	Flowering		- If flowering has started, then four bee boxes may be kept for one hectare crop area. Avoid spray of insecticides in such area.
Field Pea/ Lentil	Vegetative	Powdery Mildew	- Spray Bayleton (Triademofon 25%WP) @ 7.5 g/ pump (15litre capacity) or Dinocap (Karathane 46% EC) @ 7.5ml/ pump.
		Aphid	- Spray Cypermethrin @2ml/lit of water or Nuvan @ 0.5ml/ lit of water against aphid. - For organic control against aphid, sprays that consist of Azadirachtin/ neem oil or pyrethrin may be used.
Horticulture Crops			
French bean	Land preparation		-Land preparation for sowing of French bean should be started. -Quality seed should be collected. -Seed treatment against soil born diseases is advised preferably Trichoderma harzianum @ 10gm/kg seed is recommended. -Seed rate for dwarf variety are 50-60 kg/ha at 10X30 cm spacing and 30-40 kg at 30X45 cm spacing for pole type.
Okra/bhindi	Land preparation		-land preparation for sowing of Bhindi should be started.
Tomato	Top dressing and earthing up		-40-45 days old tomato should be top dressed with 25 kg urea followed by earthing up.
Cucurbits (bottle gourd, sponge gourd, pumpkin, water melon, etc.)	Offseason		-Prepare field into fine tilt and exposed to the sun for 7-10 days to avoid multiplication of mycelium for powdery mildew. - Spray Bayleton (Triademofon 25%WP) @ 7.5 g/ pump (15litre capacity) or Ntivo (Tebuconazole 50% + Trifloxystrobin 25% W. G) at the same dose. - Transplant seedlings of 4-stage leaves at warm temperature.
Onion	Vegetative		- Sufficient water should be made available for proper vegetative growth as it will result in poor bulb formation. - If availability of water is a problem mulching material free from fungal diseases may also be used. - Neck portion in plant should not be covered with soil
Potato	For seed		- Try to minimize aphid population, if it is more than 2/100 compound leaves. Spray Imidachlorpid (Confidor) @ 4gm/litre of water. 100gm/250 litre of water is sufficient for 1 sangam. Repeat the spray at 10-15 days. - remove off type plants showing mottling, mosaic, wrinkle and leaf rolling symptom. - Cut the haulm at ground level in Jan/Feb, in the valley. Ensure no regrowth of the stem. - Harvest the crop when the skin of the tuber has become firm. - Harvest should be done on sunny day only. Heap the produce in the shade for curing of skin and left undisturbed for 15-20 days.
Animal Sciences			
Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
Poultry (Chicken/ Turkey/ Duck)	All age groups	Care & management	- To protect birds of all age groups from inclement weather, there should be adequate arrangements for artificial lighting and heating.



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			- Needed to increase energy giving ingredients of feed (i.e. Maize, Wheat, Bajra etc.) and can be added 5% more.
		Ranikhet Diseases	Birds must be vaccinated as per recommended schedule mentioned below as the probability of occurrence of the disease is high during March- April months. 1. F-1 Strain may be first administered within 7 days of age and second dose may be given at 30days for all birds. 2. R ₂ B vaccine of 8-9 weeks of age group birds (layers). 3. Killed ND virus vaccine of 16-18 weeks of age group birds (layers). After that at every two months interval.
Sheep/ Goat	All age groups excepts the young ones	PPR (Peste Des Petits Ruminants)	- If the animals have not yet been vaccinated, give vaccine now for PPR (Peste Des Petits Ruminants).
		Enterotoxemia	- If the Lambs and Kids in particular should be given the vaccination to prevent Enterotoxaemia.
		Ectoparasitism	- Keep the sheds clean. Hang Bouquets of Basil (Ocimum sanctum) or Lemon Grass (Cymbopogon citrates) in the animals sheds to keep away the ecto-parasites. Neem oil based disinfectants can be sprayed. Butox solution (2 C.C. in 1 litre of water) can also be used.
Pig	All age groups excepts the young ones	Care & management for newly born one	-Artificial lighting and heating to the piglets. -Provide adequate bedding materials.
		Deworming	-Give Morantel citrate tablet @ 15 mg/kg of body weight.
		Ectoparasitism	- Keep the sheds clean. Hang Bouquets of Basil (Ocimum sanctum) or Lemon Grass (Cymbopogon citrates) in the animals sheds to keep away the ecto-parasites. Neem oil based disinfectants can be sprayed. Butox solution (2 C.C. in 1 litre of water) can also be used.
		Hog Cholera	-Vaccination against swine fever must be carried out.
Cattle	All age groups excepts the young ones	B.Q./ H.S/FMD	-If the animals have not yet been vaccinated, give vaccine, now for Black Quarter, Haemorrhagic septicaemia, Foot & mouth Disease.
		Ectoparasitism	- Keep the sheds clean. Hang Bouquets of Basil (Ocimum sanctum) or Lemon Grass (Cymbopogon citrates) in the animals sheds to keep away the ecto-parasites. Neem oil based disinfectants can be sprayed. Butox solution (2 C.C. in 1 litre of water) can also be used.
		Johnes disease & Sterility	Immediate proper treatment for the disease should be provided.
		Fodder crops	-Maize should be sown for use as green fodder. -Napier/Guinea grass may be transplanted. -Silage can be prepared.
		Puerperal Fever in Pregnant animals	-50-60 gram of mineral mixture every day.
		Decrease in milk production	-The milk & urine samples must be sent for testing.
	Breedable age group	Controlled breeding	-control breeding programme for animals should continue in the month of February so the all participating animals become pregnant during this month.
	Milch cow	Mastitis	-To prevent mastitis they should be milked completely.
Fishery:			
Type of Farming	Stage	Management	Agro-metrological advisories
Carp culture	Fries/ fingerlings/ brooders	Pond and water	-Maintain minimum depth of 1.5 – 2.0 m by filling fresh and clean water. -Apply Agri-Lime in brooder pond at small quantity at an interval of 30 days regularly.
		Feed	Provide feed 1-2 times @ 2 % body weight per day.
		Fish	- Male and female brooders should be stock in separate ponds for early breeding programs for Common Carp. - Harvesting of fish may be done in area where water availability is low.

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8th March, 2016

Imphal West

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**Significant past weather for the preceding bi-weekly of
Imphal - West (4th to 7th March, 2016)**

The sky was mainly Clear to partly cloudy. The Rainfall 2.4 mm was recorded during past four days. Maximum temperature range observed was 26.4 – 28.5 °C, range of minimum temperature observed was 11.0 – 13.0 °C, mean relative humidity observed in morning and afternoon were 92 % and 47 % respectively. The average wind speed range was 4.1 – 11.1 km/hr.

**Weather forecast for next five days of Imphal West
(9th to 13th March, 2016)**

Light rains likely during the next five days. Sky will remain mainly clear to fair sky, with maximum temp. of 27.0 – 29.0 °C & minimum temp. 12.0 – 13.0 °C. Relative humidity may reach upto 95% (max RH) & 22 % (min RH). The average wind speed may be 3-4 km/hr. Wind direction may be South Westerly to Westerly during next five days.

Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Field Crops			
Rapeseed/ Mustard	Flowering		- If flowering has started, then four bee boxes may be kept for one hectare crop area. Avoid spray of insecticides in such area.
Field Pea/ Lentil	Vegetative	Powdery Mildew	- Spray Bayleton (Triademofon 25%WP) @ 7.5 g/ pump (15litre capacity) or Dinocap (Karathane 46% EC) @ 7.5ml/ pump.
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Horticulture Crops			
French bean	Land preparation		-Land preparation for sowing of French bean should be started. -Quality seed should be collected. -Seed treatment against soil born diseases is advised preferably Trichoderma harzianum @ 10gm/kg seed is recommended. -Seed rate for dwarf variety are 50-60 kg/ha at 10X30 cm spacing and 30-40 kg at 30X45 cm spacing for pole type.
Okra/bhindi	Land preparation		-land preparation for sowing of Bhindi should be started.
Tomato	Top dressing and earthing up		-40-45 days old tomato should be top dressed with 25 kg urea followed by earthing up.
Cucurbits (bottle gourd, sponge gourd, pumpkin, water melon, etc.)	Offseason		-Prepare field into fine tilt and exposed to the sun for 7-10 days to avoid multiplication of mycelium for powdery mildew. - Spray Bayleton (Triademofon 25%WP) @ 7.5 g/ pump (15litre capacity) or Ntivo (Tebuconazole 50% + Trifloxystrobin 25% W. G) at the same dose. - Transplant seedlings of 4-stage leaves at warm temperature.
Onion	Vegetative		- Sufficient water should be made available for proper vegetative growth as it will result in poor bulb formation. - If availability of water is a problem mulching material free from fungal diseases may also be used. - Neck portion in plant should not be covered with soil
Potato	For seed		- Try to minimize aphid population, if it is more than 2/100 compound leaves. Spray Imidachlorpid (Confidor) @ 4gm/litre of water. 100gm/250 litre of water is sufficient for 1 sangam. Repeat the spray at 10-15 days. - remove off type plants showing mottling, mosaic, wrinkle and leaf rolling symptom. - Cut the haulm at ground level in Jan/Feb, in the valley. Ensure no regrowth of the stem. - Harvest the crop when the skin of the tuber has become firm. - Harvest should be done on sunny day only. Heap the produce in the shade for curing of skin and left undisturbed for 15-20 days.
Animal Sciences			
Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
Poultry (Chicken/ Turkey/ Duck)	All age groups	Care & management	- To protect birds of all age groups from inclement weather, there should be adequate arrangements for artificial lighting and heating.



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		Ranikhet Diseases	Birds must be vaccinated as per recommended schedule mentioned below as the probability of occurrence of the disease is high during March- April months. 1. F-1 Strain may be first administered within 7 days of age and second dose may be given at 30days for all birds. 2. R ₂ B vaccine of 8-9 weeks of age group birds (layers). 3. Killed ND virus vaccine of 16-18 weeks of age group birds (layers). After that at every two months interval.
Sheep/ Goat	All age groups excepts the young ones	PPR (Peste Des Petits Ruminants)	- If the animals have not yet been vaccinated, give vaccine now for PPR (Peste Des Petits Ruminants).
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		Ectoparasitism	- Keep the sheds clean. Hang Bouquets of Basil (Ocimum sanctum) or Lemon Grass (Cymbopogon citrates) in the animals sheds to keep away the ecto-parasites. Neem oil based disinfectants can be sprayed. Butox solution (2 C.C. in 1 litre of water) can also be used.
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		Decrease in milk production	-The milk & urine samples must be sent for testing.
	Breedable age group	Controlled breeding	-control breeding programme for animals should continue in the month of February so the all participating animals become pregnant during this month.
	Milch cow	Mastitis	-To prevent mastitis they should be milked completely.
Fishery:			
Type of Farming	Stage	Management	Agro-metrological advisories
Carp culture	Fries/ fingerlings/ brooders	Pond and water	-Maintain minimum depth of 1.5 – 2.0 m by filling fresh and clean water. -Apply Agri-Lime in brooder pond at small quantity at an interval of 30 days regularly.
		Feed	Provide feed 1-2 times @ 2 % body weight per day.
		Fish	- Male and female brooders should be stock in separate ponds for early breeding programs for Common Carp. - Harvesting of fish may be done in area where water availability is low.

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



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MANIPUR BULLETIN

8th March, 2016

Chandel

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Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
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			- Needed to increase energy giving ingredients of feed (i.e. Maize, Wheat, Bajra etc.) and can be added 5% more.
		Ranikhet Diseases	Birds must be vaccinated as per recommended schedule mentioned below as the probability of occurrence of the disease is high during March- April months. 1. F-1 Strain may be first administered within 7 days of age and second dose may be given at 30days for all birds. 2. R ₂ B vaccine of 8-9 weeks of age group birds (layers). 3. Killed ND virus vaccine of 16-18 weeks of age group birds (layers). After that at every two months interval.
Sheep/ Goat	All age groups excepts the young ones	PPR (Peste Des Petits Ruminants)	- If the animals have not yet been vaccinated, give vaccine now for PPR (Peste Des Petits Ruminants).
		Enterotoxemia	- If the Lambs and Kids in particular should be given the vaccination to prevent Enterotoxaemia.
		Ectoparasitism	- Keep the sheds clean. Hang Bouquets of Basil (Ocimum sanctum) or Lemon Grass (Cymbopogon citrates) in the animals sheds to keep away the ecto-parasites. Neem oil based disinfectants can be sprayed. Butox solution (2 C.C. in 1 litre of water) can also be used.
Pig	All age groups excepts the young ones	Care & management for newly born one	-Artificial lighting and heating to the piglets. -Provide adequate bedding materials.
		Deworming	-Give Morantel citrate tablet @ 15 mg/kg of body weight.
		Ectoparasitism	- Keep the sheds clean. Hang Bouquets of Basil (Ocimum sanctum) or Lemon Grass (Cymbopogon citrates) in the animals sheds to keep away the ecto-parasites. Neem oil based disinfectants can be sprayed. Butox solution (2 C.C. in 1 litre of water) can also be used.
		Hog Cholera	-Vaccination against swine fever must be carried out.
Cattle	All age groups excepts the young ones	B.Q./ H.S/FMD	-If the animals have not yet been vaccinated, give vaccine, now for Black Quarter, Haemorrhagic septicaemia, Foot & mouth Disease.
		Ectoparasitism	- Keep the sheds clean. Hang Bouquets of Basil (Ocimum sanctum) or Lemon Grass (Cymbopogon citrates) in the animals sheds to keep away the ecto-parasites. Neem oil based disinfectants can be sprayed. Butox solution (2 C.C. in 1 litre of water) can also be used.
		Johnes disease & Sterility	Immediate proper treatment for the disease should be provided.
		Fodder crops	-Maize should be sown for use as green fodder. -Napier/Guinea grass may be transplanted. -Silage can be prepared.
		Puerperal Fever in Pregnant animals	-50-60 gram of mineral mixture every day.
		Decrease in milk production	-The milk & urine samples must be sent for testing.
	Breedable age group	Controlled breeding	-control breeding programme for animals should continue in the month of February so the all participating animals become pregnant during this month.
	Milch cow	Mastitis	-To prevent mastitis they should be milked completely.
Fishery:			
Type of Farming	Stage	Management	Agro-metrological advisories
Carp culture	Fries/ fingerlings/ brooders	Pond and water	-Maintain minimum depth of 1.5 – 2.0 m by filling fresh and clean water. -Apply Agri-Lime in brooder pond at small quantity at an interval of 30 days regularly.
		Feed	Provide feed 1-2 times @ 2 % body weight per day.
		Fish	- Male and female brooders should be stock in separate ponds for early breeding programs for Common Carp. - Harvesting of fish may be done in area where water availability is low.

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



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



“Gramin Krishi Mausam Seva”

MANIPUR BULLETIN

8th March, 2016

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 9th to 13th March, 2016 as below:

**Significant past weather for the preceding bi-weekly of
Imphal - West (4th to 7th March, 2016)**

The sky was mainly Clear to partly cloudy. The Rainfall 2.4 mm was recorded during past four days. Maximum temperature range observed was 26.4 – 28.5 °C, range of minimum temperature observed was 11.0 – 13.0 °C, mean relative humidity observed in morning and afternoon were 92 % and 47 % respectively. The average wind speed range was 4.1 – 11.1 km/hr.

**Weather forecast for next five days of Churachandpur
(9th to 13th March, 2016)**

Light rains likely during the next five days. The sky will remain mainly clear to fair sky, with maximum temp. of 30.0 – 32.0 °C & minimum temp. 15.0 – 16.0 °C. Relative humidity may reach upto 75% (max RH) & 18 % (min RH). The average wind speed may be 3-4 km/hr. Wind direction may be South south Easterly to Westerly during next five days.

Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Field Crops			
Rapeseed/ Mustard	Flowering		- If flowering has started, then four bee boxes may be kept for one hectare crop area. Avoid spray of insecticides in such area.
Field Pea/ Lentil	Vegetative	Powdery Mildew	- Spray Bayleton (Triademofon 25%WP) @ 7.5 g/ pump (15litre capacity) or Dinocap (Karathane 46% EC) @ 7.5ml/ pump.
		Aphid	- Spray Cypermethrin @2ml/lit of water or Nuvan @ 0.5ml/ lit of water against aphid. - For organic control against aphid, sprays that consist of Azadirachtin/ neem oil or pyrethrin may be used.
Horticulture Crops			
French bean	Land preparation		-Land preparation for sowing of French bean should be started. -Quality seed should be collected. -Seed treatment against soil born diseases is advised preferably Trichoderma harzianum @ 10gm/kg seed is recommended. -Seed rate for dwarf variety are 50-60 kg/ha at 10X30 cm spacing and 30-40 kg at 30X45 cm spacing for pole type.
Okra/bhindi	Land preparation		-land preparation for sowing of Bhindi should be started.
Tomato	Top dressing and earthing up		-40-45 days old tomato should be top dressed with 25 kg urea followed by earthing up.
Cucurbits (bottle gourd, sponge gourd, pumpkin, water melon, etc.)	Offseason		-Prepare field into fine tilt and exposed to the sun for 7-10 days to avoid multiplication of mycelium for powdery mildew. - Spray Bayleton (Triademofon 25%WP) @ 7.5 g/ pump (15litre capacity) or Ntivo (Tebuconazole 50% + Trifloxystrobin 25% W. G) at the same dose. - Transplant seedlings of 4-stage leaves at warm temperature.
Onion	Vegetative		- Sufficient water should be made available for proper vegetative growth as it will result in poor bulb formation. - If availability of water is a problem mulching material free from fungal diseases may also be used. - Neck portion in plant should not be covered with soil
Potato	For seed		- Try to minimize aphid population, if it is more than 2/100 compound leaves. Spray Imidachlorpid (Confidor) @ 4gm/litre of water. 100gm/250 litre of water is sufficient for 1 sangam. Repeat the spray at 10-15 days. - remove off type plants showing mottling, mosaic, wrinkle and leaf rolling symptom. - Cut the haulm at ground level in Jan/Feb, in the valley. Ensure no regrowth of the stem. - Harvest the crop when the skin of the tuber has become firm. - Harvest should be done on sunny day only. Heap the produce in the shade for curing of skin and left undisturbed for 15-20 days.
Animal Sciences			
Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
Poultry (Chicken/ Turkey/ Duck)	All age groups	Care & management	- To protect birds of all age groups from inclement weather, there should be adequate arrangements for artificial lighting and heating.



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



“Gramin Krishi Mausam Seva”

			- Needed to increase energy giving ingredients of feed (i.e. Maize, Wheat, Bajra etc.) and can be added 5% more.
		Ranikhet Diseases	Birds must be vaccinated as per recommended schedule mentioned below as the probability of occurrence of the disease is high during March- April months. 1. F-1 Strain may be first administered within 7 days of age and second dose may be given at 30days for all birds. 2. R ₂ B vaccine of 8-9 weeks of age group birds (layers). 3. Killed ND virus vaccine of 16-18 weeks of age group birds (layers). After that at every two months interval.
Sheep/ Goat	All age groups excepts the young ones	PPR (Peste Des Petits Ruminants)	- If the animals have not yet been vaccinated, give vaccine now for PPR (Peste Des Petits Ruminants).
		Enterotoxemia	- If the Lambs and Kids in particular should be given the vaccination to prevent Enterotoxaemia.
		Ectoparasitism	- Keep the sheds clean. Hang Bouquets of Basil (Ocimum sanctum) or Lemon Grass (Cymbopogon citrates) in the animals sheds to keep away the ecto-parasites. Neem oil based disinfectants can be sprayed. Butox solution (2 C.C. in 1 litre of water) can also be used.
Pig	All age groups excepts the young ones	Care & management for newly born one	-Artificial lighting and heating to the piglets. -Provide adequate bedding materials.
		Deworming	-Give Morantel citrate tablet @ 15 mg/kg of body weight.
		Ectoparasitism	- Keep the sheds clean. Hang Bouquets of Basil (Ocimum sanctum) or Lemon Grass (Cymbopogon citrates) in the animals sheds to keep away the ecto-parasites. Neem oil based disinfectants can be sprayed. Butox solution (2 C.C. in 1 litre of water) can also be used.
		Hog Cholera	-Vaccination against swine fever must be carried out.
Cattle	All age groups excepts the young ones	B.Q./ H.S/FMD	-If the animals have not yet been vaccinated, give vaccine, now for Black Quarter, Haemorrhagic septicaemia, Foot & mouth Disease.
		Ectoparasitism	- Keep the sheds clean. Hang Bouquets of Basil (Ocimum sanctum) or Lemon Grass (Cymbopogon citrates) in the animals sheds to keep away the ecto-parasites. Neem oil based disinfectants can be sprayed. Butox solution (2 C.C. in 1 litre of water) can also be used.
		Johnes disease & Sterility	Immediate proper treatment for the disease should be provided.
		Fodder crops	-Maize should be sown for use as green fodder. -Napier/Guinea grass may be transplanted. -Silage can be prepared.
		Puerperal Fever in Pregnant animals	-50-60 gram of mineral mixture every day.
		Decrease in milk production	-The milk & urine samples must be sent for testing.
	Breedable age group	Controlled breeding	-control breeding programme for animals should continue in the month of February so the all participating animals become pregnant during this month.
	Milch cow	Mastitis	-To prevent mastitis they should be milked completely.
Fishery:			
Type of Farming	Stage	Management	Agro-metrological advisories
Carp culture	Fries/ fingerlings/ brooders	Pond and water	-Maintain minimum depth of 1.5 – 2.0 m by filling fresh and clean water. -Apply Agri-Lime in brooder pond at small quantity at an interval of 30 days regularly.
		Feed	Provide feed 1-2 times @ 2 % body weight per day.
		Fish	- Male and female brooders should be stock in separate ponds for early breeding programs for Common Carp. - Harvesting of fish may be done in area where water availability is low.

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



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



“Gramin Krishi Mausam Seva”

MANIPUR BULLETIN

8th March, 2016

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 9th to 13th March, 2016 as below:

**Significant past weather for the preceding bi-weekly of
Imphal - West (4th to 7th March, 2016)**

The sky was mainly Clear to partly cloudy. The Rainfall 2.4 mm was recorded during past four days. Maximum temperature range observed was 26.4 – 28.5 °C, range of minimum temperature observed was 11.0 – 13.0 °C, mean relative humidity observed in morning and afternoon were 92 % and 47 % respectively. The average wind speed range was 4.1 – 11.1 km/hr.

**Weather forecast for next five days of Imphal-East
(9th to 13th March, 2016)**

Light rains likely during the next five days. The sky will remain mainly clear to fair sky, with maximum temp. of 27.0 – 29.0 °C & minimum temp. 12.0 – 13.0 °C. Relative humidity may reach upto 95% (max RH) & 19 % (min RH). The average wind speed may be 2-3 km/hr. Wind direction may be South south Westerly to Westerly during next five days.

Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Field Crops			
Rapeseed/ Mustard	Flowering		- If flowering has started, then four bee boxes may be kept for one hectare crop area. Avoid spray of insecticides in such area.
Field Pea/ Lentil	Vegetative	Powdery Mildew	- Spray Bayleton (Triademofon 25%WP) @ 7.5 g/ pump (15litre capacity) or Dinocap (Karathane 46% EC) @ 7.5ml/ pump.
		Aphid	- Spray Cypermethrin @2ml/lit of water or Nuvan @ 0.5ml/ lit of water against aphid. - For organic control against aphid, sprays that consist of Azadirachtin/ neem oil or pyrethrin may be used.
Horticulture Crops			
French bean	Land preparation		-Land preparation for sowing of French bean should be started. -Quality seed should be collected. -Seed treatment against soil born diseases is advised preferably Trichoderma harzianum @ 10gm/kg seed is recommended. -Seed rate for dwarf variety are 50-60 kg/ha at 10X30 cm spacing and 30-40 kg at 30X45 cm spacing for pole type.
Okra/bhindi	Land preparation		-land preparation for sowing of Bhindi should be started.
Tomato	Top dressing and earthing up		-40-45 days old tomato should be top dressed with 25 kg urea followed by earthing up.
Cucurbits (bottle gourd, sponge gourd, pumpkin, water melon, etc.)	Offseason		-Prepare field into fine tilt and exposed to the sun for 7-10 days to avoid multiplication of mycelium for powdery mildew. - Spray Bayleton (Triademofon 25%WP) @ 7.5 g/ pump (15litre capacity) or Ntivo (Tebuconazole 50% + Trifloxystrobin 25% W. G) at the same dose. - Transplant seedlings of 4-stage leaves at warm temperature.
Onion	Vegetative		- Sufficient water should be made available for proper vegetative growth as it will result in poor bulb formation. - If availability of water is a problem mulching material free from fungal diseases may also be used. - Neck portion in plant should not be covered with soil
Potato	For seed		- Try to minimize aphid population, if it is more than 2/100 compound leaves. Spray Imidachlorpid (Confidor) @ 4gm/litre of water. 100gm/250 litre of water is sufficient for 1 sangam. Repeat the spray at 10-15 days. - remove off type plants showing mottling, mosaic, wrinkle and leaf rolling symptom. - Cut the haulm at ground level in Jan/Feb, in the valley. Ensure no regrowth of the stem. - Harvest the crop when the skin of the tuber has become firm. - Harvest should be done on sunny day only. Heap the produce in the shade for curing of skin and left undisturbed for 15-20 days.
Animal Sciences			
Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
Poultry (Chicken/ Turkey/ Duck)	All age groups	Care & management	- To protect birds of all age groups from inclement weather, there should be adequate arrangements for artificial lighting and heating.



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



“Gramin Krishi Mausam Seva”

			- Needed to increase energy giving ingredients of feed (i.e. Maize, Wheat, Bajra etc.) and can be added 5% more.
		Ranikhet Diseases	Birds must be vaccinated as per recommended schedule mentioned below as the probability of occurrence of the disease is high during March- April months. 1. F-1 Strain may be first administered within 7 days of age and second dose may be given at 30days for all birds. 2. R ₂ B vaccine of 8-9 weeks of age group birds (layers). 3. Killed ND virus vaccine of 16-18 weeks of age group birds (layers). After that at every two months interval.
Sheep/ Goat	All age groups excepts the young ones	PPR (Peste Des Petits Ruminants)	- If the animals have not yet been vaccinated, give vaccine now for PPR (Peste Des Petits Ruminants).
		Enterotoxemia	- If the Lambs and Kids in particular should be given the vaccination to prevent Enterotoxaemia.
		Ectoparasitism	- Keep the sheds clean. Hang Bouquets of Basil (Ocimum sanctum) or Lemon Grass (Cymbopogon citrates) in the animals sheds to keep away the ecto-parasites. Neem oil based disinfectants can be sprayed. Butox solution (2 C.C. in 1 litre of water) can also be used.
Pig	All age groups excepts the young ones	Care & management for newly born one	-Artificial lighting and heating to the piglets. -Provide adequate bedding materials.
		Deworming	-Give Morantel citrate tablet @ 15 mg/kg of body weight.
		Ectoparasitism	- Keep the sheds clean. Hang Bouquets of Basil (Ocimum sanctum) or Lemon Grass (Cymbopogon citrates) in the animals sheds to keep away the ecto-parasites. Neem oil based disinfectants can be sprayed. Butox solution (2 C.C. in 1 litre of water) can also be used.
		Hog Cholera	-Vaccination against swine fever must be carried out.
Cattle	All age groups excepts the young ones	B.Q./ H.S/FMD	-If the animals have not yet been vaccinated, give vaccine, now for Black Quarter, Haemorrhagic septicaemia, Foot & mouth Disease.
		Ectoparasitism	- Keep the sheds clean. Hang Bouquets of Basil (Ocimum sanctum) or Lemon Grass (Cymbopogon citrates) in the animals sheds to keep away the ecto-parasites. Neem oil based disinfectants can be sprayed. Butox solution (2 C.C. in 1 litre of water) can also be used.
		Johnes disease & Sterility	Immediate proper treatment for the disease should be provided.
		Fodder crops	-Maize should be sown for use as green fodder. -Napier/Guinea grass may be transplanted. -Silage can be prepared.
		Puerperal Fever in Pregnant animals	-50-60 gram of mineral mixture every day.
		Decrease in milk production	-The milk & urine samples must be sent for testing.
	Breedable age group	Controlled breeding	-control breeding programme for animals should continue in the month of February so the all participating animals become pregnant during this month.
	Milch cow	Mastitis	-To prevent mastitis they should be milked completely.
Fishery:			
Type of Farming	Stage	Management	Agro-metrological advisories
Carp culture	Fries/ fingerlings/ brooders	Pond and water	-Maintain minimum depth of 1.5 – 2.0 m by filling fresh and clean water. -Apply Agri-Lime in brooder pond at small quantity at an interval of 30 days regularly.
		Feed	Provide feed 1-2 times @ 2 % body weight per day.
		Fish	- Male and female brooders should be stock in separate ponds for early breeding programs for Common Carp. - Harvesting of fish may be done in area where water availability is low.

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



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



“Gramin Krishi Mausam Seva”

MANIPUR BULLETIN

8th March, 2016

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 9th to 13th March, 2016 as below:

**Significant past weather for the preceding bi-weekly of
Imphal - West (4th to 7th March, 2016)**

The sky was mainly Clear to partly cloudy. The Rainfall 2.4 mm was recorded during past four days. Maximum temperature range observed was 26.4 – 28.5 °C, range of minimum temperature observed was 11.0 – 13.0 °C, mean relative humidity observed in morning and afternoon were 92 % and 47 % respectively. The average wind speed range was 4.1 – 11.1 km/hr.

**Weather forecast for next five days of Senapati
(9th to 13th March, 2016)**

Light rains likely during the next five days. The sky will remain mainly clear to fair sky, with maximum temp. of 27.0 – 29.0 °C & minimum temp. 8.0 – 10.0 °C. Relative humidity may reach upto 93% (max RH) & 20 % (min RH). The average wind speed may be 2-3 km/hr. Wind direction may be South south Westerly to South west Westerly during next five days.

Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Field Crops			
Rapeseed/ Mustard	Flowering		- If flowering has started, then four bee boxes may be kept for one hectare crop area. Avoid spray of insecticides in such area.
Field Pea/ Lentil	Vegetative	Powdery Mildew	- Spray Bayleton (Triademofon 25%WP) @ 7.5 g/ pump (15litre capacity) or Dinocap (Karathane 46% EC) @ 7.5ml/ pump.
		Aphid	- Spray Cypermethrin @2ml/lit of water or Nuvan @ 0.5ml/ lit of water against aphid. - For organic control against aphid, sprays that consist of Azadirachtin/ neem oil or pyrethrin may be used.
Horticulture Crops			
French bean	Land preparation		-Land preparation for sowing of French bean should be started. -Quality seed should be collected. -Seed treatment against soil born diseases is advised preferably Trichoderma harzianum @ 10gm/kg seed is recommended. -Seed rate for dwarf variety are 50-60 kg/ha at 10X30 cm spacing and 30-40 kg at 30X45 cm spacing for pole type.
Okra/bhindi	Land preparation		-land preparation for sowing of Bhindi should be started.
Tomato	Top dressing and earthing up		-40-45 days old tomato should be top dressed with 25 kg urea followed by earthing up.
Cucurbits (bottle gourd, sponge gourd, pumpkin, water melon, etc.)	Offseason		-Prepare field into fine tilt and exposed to the sun for 7-10 days to avoid multiplication of mycelium for powdery mildew. - Spray Bayleton (Triademofon 25%WP) @ 7.5 g/ pump (15litre capacity) or Ntivo (Tebuconazole 50% + Trifloxystrobin 25% W. G) at the same dose. - Transplant seedlings of 4-stage leaves at warm temperature.
Onion	Vegetative		- Sufficient water should be made available for proper vegetative growth as it will result in poor bulb formation. - If availability of water is a problem mulching material free from fungal diseases may also be used. - Neck portion in plant should not be covered with soil
Potato	For seed		- Try to minimize aphid population, if it is more than 2/100 compound leaves. Spray Imidachlorpid (Confidor) @ 4gm/litre of water. 100gm/250 litre of water is sufficient for 1 sangam. Repeat the spray at 10-15 days. - remove off type plants showing mottling, mosaic, wrinkle and leaf rolling symptom. - Cut the haulm at ground level in Jan/Feb, in the valley. Ensure no regrowth of the stem. - Harvest the crop when the skin of the tuber has become firm. - Harvest should be done on sunny day only. Heap the produce in the shade for curing of skin and left undisturbed for 15-20 days.
Animal Sciences			
Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
Poultry (Chicken/ Turkey/ Duck)	All age groups	Care & management	- To protect birds of all age groups from inclement weather, there should be adequate arrangements for artificial lighting and heating.



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



“Gramin Krishi Mausam Seva”

			- Needed to increase energy giving ingredients of feed (i.e. Maize, Wheat, Bajra etc.) and can be added 5% more.
		Ranikhet Diseases	Birds must be vaccinated as per recommended schedule mentioned below as the probability of occurrence of the disease is high during March- April months. 1. F-1 Strain may be first administered within 7 days of age and second dose may be given at 30days for all birds. 2. R ₂ B vaccine of 8-9 weeks of age group birds (layers). 3. Killed ND virus vaccine of 16-18 weeks of age group birds (layers). After that at every two months interval.
Sheep/ Goat	All age groups excepts the young ones	PPR (Peste Des Petits Ruminants)	- If the animals have not yet been vaccinated, give vaccine now for PPR (Peste Des Petits Ruminants).
		Enterotoxemia	- If the Lambs and Kids in particular should be given the vaccination to prevent Enterotoxaemia.
		Ectoparasitism	- Keep the sheds clean. Hang Bouquets of Basil (Ocimum sanctum) or Lemon Grass (Cymbopogon citrates) in the animals sheds to keep away the ecto-parasites. Neem oil based disinfectants can be sprayed. Butox solution (2 C.C. in 1 litre of water) can also be used.
Pig	All age groups excepts the young ones	Care & management for newly born one	-Artificial lighting and heating to the piglets. -Provide adequate bedding materials.
		Deworming	-Give Morantel citrate tablet @ 15 mg/kg of body weight.
		Ectoparasitism	- Keep the sheds clean. Hang Bouquets of Basil (Ocimum sanctum) or Lemon Grass (Cymbopogon citrates) in the animals sheds to keep away the ecto-parasites. Neem oil based disinfectants can be sprayed. Butox solution (2 C.C. in 1 litre of water) can also be used.
		Hog Cholera	-Vaccination against swine fever must be carried out.
Cattle	All age groups excepts the young ones	B.Q./ H.S/FMD	-If the animals have not yet been vaccinated, give vaccine, now for Black Quarter, Haemorrhagic septicaemia, Foot & mouth Disease.
		Ectoparasitism	- Keep the sheds clean. Hang Bouquets of Basil (Ocimum sanctum) or Lemon Grass (Cymbopogon citrates) in the animals sheds to keep away the ecto-parasites. Neem oil based disinfectants can be sprayed. Butox solution (2 C.C. in 1 litre of water) can also be used.
		Johnes disease & Sterility	Immediate proper treatment for the disease should be provided.
		Fodder crops	-Maize should be sown for use as green fodder. -Napier/Guinea grass may be transplanted. -Silage can be prepared.
		Puerperal Fever in Pregnant animals	-50-60 gram of mineral mixture every day.
		Decrease in milk production	-The milk & urine samples must be sent for testing.
	Breedable age group	Controlled breeding	-control breeding programme for animals should continue in the month of February so the all participating animals become pregnant during this month.
	Milch cow	Mastitis	-To prevent mastitis they should be milked completely.
Fishery:			
Type of Farming	Stage	Management	Agro-metrological advisories
Carp culture	Fries/ fingerlings/ brooders	Pond and water	-Maintain minimum depth of 1.5 – 2.0 m by filling fresh and clean water. -Apply Agri-Lime in brooder pond at small quantity at an interval of 30 days regularly.
		Feed	Provide feed 1-2 times @ 2 % body weight per day.
		Fish	- Male and female brooders should be stock in separate ponds for early breeding programs for Common Carp. - Harvesting of fish may be done in area where water availability is low.

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



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



“Gramin Krishi Mausam Seva”

MANIPUR BULLETIN

8th March, 2016

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 9th to 13th March, 2016 as below:

**Significant past weather for the preceding bi-weekly of
Imphal - West (4th to 7th March, 2016)**

The sky was mainly Clear to partly cloudy. The Rainfall 2.4 mm was recorded during past four days. Maximum temperature range observed was 26.4 – 28.5 °C, range of minimum temperature observed was 11.0 – 13.0 °C, mean relative humidity observed in morning and afternoon were 92 % and 47 % respectively. The average wind speed range was 4.1 – 11.1 km/hr.

**Weather forecast for next five days of Tamenglong
(9th to 13th March, 2016)**

Light rains likely during the next five days. The sky will remain mainly clear to fair sky, with maximum temp. of 29.0 – 31.0 °C & minimum temp. 10.0 – 12.0 °C. Relative humidity may reach upto 88% (max RH) & 20 % (min RH). The average wind speed may be 2-3 km/hr. Wind direction may be Northerly to Southerly during next five days.

Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Field Crops			
Rapeseed/ Mustard	Flowering		- If flowering has started, then four bee boxes may be kept for one hectare crop area. Avoid spray of insecticides in such area.
Field Pea/ Lentil	Vegetative	Powdery Mildew	- Spray Bayleton (Triademofon 25%WP) @ 7.5 g/ pump (15litre capacity) or Dinocap (Karathane 46% EC) @ 7.5ml/ pump.
		Aphid	- Spray Cypermethrin @2ml/lit of water or Nuvan @ 0.5ml/ lit of water against aphid. - For organic control against aphid, sprays that consist of Azadirachtin/ neem oil or pyrethrin may be used.
Horticulture Crops			
French bean	Land preparation		-Land preparation for sowing of French bean should be started. -Quality seed should be collected. -Seed treatment against soil born diseases is advised preferably Trichoderma harzianum @ 10gm/kg seed is recommended. -Seed rate for dwarf variety are 50-60 kg/ha at 10X30 cm spacing and 30-40 kg at 30X45 cm spacing for pole type.
Okra/bhindi	Land preparation		-land preparation for sowing of Bhindi should be started.
Tomato	Top dressing and earthing up		-40-45 days old tomato should be top dressed with 25 kg urea followed by earthing up.
Cucurbits (bottle gourd, sponge gourd, pumpkin, water melon, etc.)	Offseason		-Prepare field into fine tilt and exposed to the sun for 7-10 days to avoid multiplication of mycelium for powdery mildew. - Spray Bayleton (Triademofon 25%WP) @ 7.5 g/ pump (15litre capacity) or Ntivo (Tebuconazole 50% + Trifloxystrobin 25% W. G) at the same dose. - Transplant seedlings of 4-stage leaves at warm temperature.
Onion	Vegetative		- Sufficient water should be made available for proper vegetative growth as it will result in poor bulb formation. - If availability of water is a problem mulching material free from fungal diseases may also be used. - Neck portion in plant should not be covered with soil
Potato	For seed		- Try to minimize aphid population, if it is more than 2/100 compound leaves. Spray Imidachlorpid (Confidor) @ 4gm/litre of water. 100gm/250 litre of water is sufficient for 1 sangam. Repeat the spray at 10-15 days. - remove off type plants showing mottling, mosaic, wrinkle and leaf rolling symptom. - Cut the haulm at ground level in Jan/Feb, in the valley. Ensure no regrowth of the stem. - Harvest the crop when the skin of the tuber has become firm. - Harvest should be done on sunny day only. Heap the produce in the shade for curing of skin and left undisturbed for 15-20 days.
Animal Sciences			
Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
Poultry (Chicken/ Turkey/ Duck)	All age groups	Care & management	- To protect birds of all age groups from inclement weather, there should be adequate arrangements for artificial lighting and heating.



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“Gramin Krishi Mausam Seva”

			- Needed to increase energy giving ingredients of feed (i.e. Maize, Wheat, Bajra etc.) and can be added 5% more.
		Ranikhet Diseases	Birds must be vaccinated as per recommended schedule mentioned below as the probability of occurrence of the disease is high during March- April months. 1. F-1 Strain may be first administered within 7 days of age and second dose may be given at 30days for all birds. 2. R ₂ B vaccine of 8-9 weeks of age group birds (layers). 3. Killed ND virus vaccine of 16-18 weeks of age group birds (layers). After that at every two months interval.
Sheep/ Goat	All age groups excepts the young ones	PPR (Peste Des Petits Ruminants)	- If the animals have not yet been vaccinated, give vaccine now for PPR (Peste Des Petits Ruminants).
		Enterotoxemia	- If the Lambs and Kids in particular should be given the vaccination to prevent Enterotoxaemia.
		Ectoparasitism	- Keep the sheds clean. Hang Bouquets of Basil (Ocimum sanctum) or Lemon Grass (Cymbopogon citrates) in the animals sheds to keep away the ecto-parasites. Neem oil based disinfectants can be sprayed. Butox solution (2 C.C. in 1 litre of water) can also be used.
Pig	All age groups excepts the young ones	Care & management for newly born one	-Artificial lighting and heating to the piglets. -Provide adequate bedding materials.
		Deworming	-Give Morantel citrate tablet @ 15 mg/kg of body weight.
		Ectoparasitism	- Keep the sheds clean. Hang Bouquets of Basil (Ocimum sanctum) or Lemon Grass (Cymbopogon citrates) in the animals sheds to keep away the ecto-parasites. Neem oil based disinfectants can be sprayed. Butox solution (2 C.C. in 1 litre of water) can also be used.
		Hog Cholera	-Vaccination against swine fever must be carried out.
Cattle	All age groups excepts the young ones	B.Q./ H.S/FMD	-If the animals have not yet been vaccinated, give vaccine, now for Black Quarter, Haemorrhagic septicaemia, Foot & mouth Disease.
		Ectoparasitism	- Keep the sheds clean. Hang Bouquets of Basil (Ocimum sanctum) or Lemon Grass (Cymbopogon citrates) in the animals sheds to keep away the ecto-parasites. Neem oil based disinfectants can be sprayed. Butox solution (2 C.C. in 1 litre of water) can also be used.
		Johnes disease & Sterility	Immediate proper treatment for the disease should be provided.
		Fodder crops	-Maize should be sown for use as green fodder. -Napier/Guinea grass may be transplanted. -Silage can be prepared.
		Puerperal Fever in Pregnant animals	-50-60 gram of mineral mixture every day.
		Decrease in milk production	-The milk & urine samples must be sent for testing.
	Breedable age group	Controlled breeding	-control breeding programme for animals should continue in the month of February so the all participating animals become pregnant during this month.
	Milch cow	Mastitis	-To prevent mastitis they should be milked completely.
Fishery:			
Type of Farming	Stage	Management	Agro-metrological advisories
Carp culture	Fries/ fingerlings/ brooders	Pond and water	-Maintain minimum depth of 1.5 – 2.0 m by filling fresh and clean water. -Apply Agri-Lime in brooder pond at small quantity at an interval of 30 days regularly.
		Feed	Provide feed 1-2 times @ 2 % body weight per day.
		Fish	- Male and female brooders should be stock in separate ponds for early breeding programs for Common Carp. - Harvesting of fish may be done in area where water availability is low.

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



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MANIPUR BULLETIN

8th March, 2016

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 9th to 13th March, 2016 as below:

Significant past weather for the preceding bi-weekly of Imphal - West (4th to 7th March, 2016) The sky was mainly Clear to partly cloudy. The Rainfall 2.4 mm was recorded during past four days. Maximum temperature range observed was 26.4 – 28.5 °C, range of minimum temperature observed was 11.0 – 13.0 °C, mean relative humidity observed in morning and afternoon were 92 % and 47 % respectively. The average wind speed range was 4.1 – 11.1 km/hr.	Weather forecast for next five days of Thoubal (9th to 13th March, 2016) Light rains likely during the next five days. The sky will remain mainly clear to fair sky, with maximum temp. of 28.0 – 30.0 °C & minimum temp. 12.0 – 13.0 °C. Relative humidity may reach upto 82% (max RH) & 18 % (min RH). The average wind speed may be 3-4 km/hr. Wind direction may be South west Westerly to Westerly during next five days.
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Field Crops			
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Field Pea/ Lentil	Vegetative	Powdery Mildew	- Spray Bayleton (Triademofon 25%WP) @ 7.5 g/ pump (15litre capacity) or Dinocap (Karathane 46% EC) @ 7.5ml/ pump.
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Cucurbits (bottle gourd, sponge gourd, pumpkin, water melon, etc.)	Offseason		-Prepare field into fine tilt and exposed to the sun for 7-10 days to avoid multiplication of mycelium for powdery mildew. - Spray Bayleton (Triademofon 25%WP) @ 7.5 g/ pump (15litre capacity) or Ntivo (Tebuconazole 50% + Trifloxystrobin 25% W. G) at the same dose. - Transplant seedlings of 4-stage leaves at warm temperature.
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Potato	For seed		- Try to minimize aphid population, if it is more than 2/100 compound leaves. Spray Imidachlorpid (Confidor) @ 4gm/litre of water. 100gm/250 litre of water is sufficient for 1 sangam. Repeat the spray at 10-15 days. - remove off type plants showing mottling, mosaic, wrinkle and leaf rolling symptom. - Cut the haulm at ground level in Jan/Feb, in the valley. Ensure no regrowth of the stem. - Harvest the crop when the skin of the tuber has become firm. - Harvest should be done on sunny day only. Heap the produce in the shade for curing of skin and left undisturbed for 15-20 days.
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