



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



“Integrated Agromet Advisory Services”

MANIPUR BULLETIN

9th January, 2015

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 10th to 14th January, 2014 as below:

Significant past weather for the preceding bi-weekly of Imphal - West (6th to 8th January, 2015)

During past three days sky was mainly clear to partly cloudy but mainly cloudy during morning hours of 8th Jan, 15. **0.2 mm** rainfall was recorded during past three days. Maximum temperature range observed was 22.4 – 23.5 °C, range of minimum temperature observed was 4.6 – 9.6 °C, mean relative humidity observed in morning and afternoon were 82.67 % and 44.67 % respectively. The average wind speed range was 1.0 – 1.5 km/hr.

Weather forecast for next five days of Churachandpur (10th to 14th January, 2014)

There may be no rain upto Wednesday. Sky will be mainly clear to partly cloudy with maximum temp. of 22.0 – 25.0 °C & minimum temp. 2.0 – 5.0 °C. Relative humidity may reach upto 100 % (maximum RH) & 41 % (minimum RH). The average wind speed may be 4-7 km/ hr during next five days.

Weather Forecast for next 3 days * 0830 hours IST of 12th January, 2014

Fog would occur at many places over Manipur.

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
Field Crops			
Rapeseed/ mustard	Vegetative to flowering	Aphid	- Use yellow plates for every 3 sq.m to attract the aphids or spray Pyrethrum @ 2ml/ litre of water on the infected patches.
		Hairy caterpillar	- Spray Quinalphos or Chloropyriphos @ 2ml/litre of water on the infected patches only .
Pulses (Field pea/ Lentil)	Vegetative	Aphid	- Spray Cypermethrin @2ml/lit of water against aphid on the infected patches only. - For organic control against aphid, sprays that consist of Azadirachtin, Neem oil or Pyrethrin may be used.
Potato	Vegetative		Earthing up may be done when the plant is 15cm high (or 35days old).
		Aphid	- If aphid is observed in small area, wash off it with plain water but if it is severe, spray cypermethrin 20 E.C. @ 1ml/ litre of water or Nuvan @ 0.5ml/litre of water.
		Cut worm	If cut-worm is observed then prepare poison bait of Trichlorfon (mixture of 1kg husk + 40g sugar + 5g Trichlorfon + water) and apply manually by putting near the stem of plant above the soil surface.
Storage			- Clean and store the seeds in RC-seed bins after proper drying of seeds and charcoal. Check for moisture content or weight of seeds. After proper drying, store grains/ seeds in well ventilated godowns.
Horticulture Crops			
Cauliflower, Cabbage & Broccoli	Transplanting		After preparation for transplanting, 850 gm Urea, 2 kg DAP and 1kg MOP along with 40 kg FYM should be incorporated with the soil in an area of 100 m ² and another 850 g Urea may be top dressed at head/ curd formation stage. Transplant at a spacing of 60 cm x 60 cm for hybrid varieties of cabbage (like Rareball, Green Hero) and cauliflower (White Flash, Sweatha).
	Head formation stage to harvesting	Plutella, Daimond, Black Moth	Farmers are advised to spray Dichlorovos 76 EC @ 1ml/ lit of water at 7 days interval.
		Leaf eating caterpillar	Spray Flubendiamide (Fame) @ 2ml/ 10 lit of water.
Cauliflower	Curd formation stage	Whip tail and Chlorosis	- Spray Tracel @ 5g/ litre of water if leaves fail to develop normally/ curl towards the terminal end or chlorosis (whitening/ yellowing of leaves) is observed.
Local cucumber	Land preparation to		- Land preparation for sowing of local cucumber (kalen thabi) may be



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(Kalenthabi)	sowing		started.
Citrus	For nursery	leaf minor	- Spray <i>Monocrotophos</i> @ 0.25-0.5ml/ lit water depending on the age of nursery.
		Leaf eating caterpillar, thrips & mite.	- Spray <i>Confidor</i> @ 0.5 ml/ lit of water.
Ginger/ Turmeric	Harvesting to storage		For storing, prepare pit/ trench. Bottom layer should be covered with river bed soil (20cm thick). Prepare a dry twigs layer on the walls of the pit, put the rhizomes inside the pit and cover the upper surface with dry twigs. Cover the upper layer with the river bed soil. Protect them from rain.

Animal Sciences

Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
Poultry	All susceptible age groups (as and when required)	Coccidiosis	Give Coximar @ 2g/lit of drinking water for 5-7 days.
		Ranikhet disease	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).
		Management	- Mix deactivated lime powder @ 2 kg per 100 sq. ft. area in litter material to prevent from caking. - Increase energy feed upto 5% (like maize, rice bran, etc.). - Add antibiotic, Hostacycline/ Duaprin @ 2 g/ lit of drinking water for 7 days along with vitamin A, vitamin B & vitamin C.
			As the temperature is becoming low during night time protect birds from cold by using polythene sheet or hessian cloth.
Sheep/ Goat	Above 3 months of age (as and when required)	Ectoparasite	Use Butox liq. @ 2ml/ 4 litres of water and wash the animal with the solution.
		F.M.D.	- Vaccinate against F.M.D.
		Deworming	- Give Albomac suspension @ 5ml per adult.
Pig	Above 3 months of age (as and when required)	Skin infection	Give Ivermectin (Indectin tab.) @ 10mg/33kg body weight.
		Deworming	- Deworm using Piperazine citrate @ 30 ml per adult animal once.
		Ticks	Add Butox liquid @ 2 ml/ lit of water and use the solution twice a week while brushing the animal.
Cattle / Buffalo/ Mithun	Above 3 months of age (as and when required)	Deworming	Deworm using TolzanF @ 100ml/300kg body weight.
		F.M.D.	- Vaccinate against F.M.D.
		Ticks/ Wounds	Topicure spray may be used twice daily on the affected parts.

Fishery:

Type of Farming	Stage & Management	Agro-metrological advisories
Carp/ Catfish culture	Stock maintenance	- Stock fish for next season and for this practices mentioned below may be done in small scale. - Ponds should be free from unwanted vegetation and insects and water depth should be maintained at 1.0 - 1.5 m. - Feeds should be provided 1-2 times a day @ 2-3% body weight per day. - Well balanced feed fortified with vitamins and minerals should be provided. - Apply Green AQ @ 4litre/ ha or lime @ 200kg/ ha. Maintain good quality of pond water.

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



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“Integrated Agromet Advisory Services”

MANIPUR BULLETIN

9th January, 2015

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 10th to 14th January, 2014 as below:

Significant past weather for the preceding bi-weekly of Imphal - West (6th to 8th January, 2015)

During past three days sky was mainly clear to partly cloudy but mainly cloudy during morning hours of 8th Jan, 15. **0.2 mm** rainfall was recorded during past three days. Maximum temperature range observed was 22.4 – 23.5 °C, range of minimum temperature observed was 4.6 – 9.6 °C, mean relative humidity observed in morning and afternoon were 82.67 % and 44.67 % respectively. The average wind speed range was 1.0 – 1.5 km/hr.

Weather forecast for next five days of Imphal-East (10th to 14th January, 2014)

There may be no rain upto Wednesday. Sky will be mainly clear to partly cloudy with maximum temp. of 23.0 – 24.0 °C & minimum temp. 5.0 – 10.0 °C. Relative humidity may reach upto 100 % (maximum RH) & 38 % (minimum RH). The average wind speed may be 2-5 km/ hr during next five days.

Weather Forecast for next 3 days * 0830 hours IST of 12th January, 2014

Fog would occur at many places over Manipur.

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
Field Crops			
Rapeseed/ mustard	Vegetative to flowering	Aphid	- Use yellow plates for every 3 sq.m to attract the aphids or spray Pyrethrum @ 2ml/ litre of water on the infected patches.
		Hairy caterpillar	- Spray Quinalphos or Chloropyriphos @ 2ml/litre of water on the infected patches only .
Pulses (Field pea/ Lentil)	Vegetative	Aphid	- Spray Cypermethrin @2ml/lit of water against aphid on the infected patches only. - For organic control against aphid, sprays that consist of Azadirachtin, Neem oil or Pyrethrin may be used.
Potato	Vegetative		Earthing up may be done when the plant is 15cm high (or 35days old).
		Aphid	- If aphid is observed in small area, wash off it with plain water but if it is severe, spray cypermethrin 20 E.C. @ 1ml/ litre of water or Nuvan @ 0.5ml/litre of water.
		Cut worm	If cut-worm is observed then prepare poison bait of Trichlorfon (mixture of 1kg husk + 40g sugar + 5g Trichlorfon + water) and apply manually by putting near the stem of plant above the soil surface.
Storage			- Clean and store the seeds in RC-seed bins after proper drying of seeds and charcoal. Check for moisture content or weight of seeds. After proper drying, store grains/ seeds in well ventilated godowns.
Horticulture Crops			
Cauliflower, Cabbage & Broccoli	Transplanting		After preparation for transplanting, 850 gm Urea, 2 kg DAP and 1kg MOP along with 40 kg FYM should be incorporated with the soil in an area of 100 m ² and another 850 g Urea may be top dressed at head/ curd formation stage. Transplant at a spacing of 60 cm x 60 cm for hybrid varieties of cabbage (like Rareball, Green Hero) and cauliflower (White Flash, Sweatha).
	Head formation stage to harvesting	Plutella, Daimond, Black Moth	Farmers are advised to spray Dichlorovos 76 EC @ 1ml/ lit of water at 7 days interval.
		Leaf eating caterpillar	Spray Flubendiamide (Fame) @ 2ml/ 10 lit of water.
Cauliflower	Curd formation stage	Whip tail and Chlorosis	- Spray Tracel @ 5g/ litre of water if leaves fail to develop normally/ curl towards the terminal end or chlorosis (whitening/ yellowing of leaves) is observed.
Local cucumber	Land preparation to		- Land preparation for sowing of local cucumber (kalen thabi) may be



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(Kalenthabi)	sowing		started.
Citrus	For nursery	leaf minor	- Spray <i>Monocrotophos</i> @ 0.25-0.5ml/ lit water depending on the age of nursery.
		Leaf eating caterpillar, thrips & mite.	- Spray <i>Confidor</i> @ 0.5 ml/ lit of water.
Ginger/ Turmeric	Harvesting to storage		For storing, prepare pit/ trench. Bottom layer should be covered with river bed soil (20cm thick). Prepare a dry twigs layer on the walls of the pit, put the rhizomes inside the pit and cover the upper surface with dry twigs. Cover the upper layer with the river bed soil. Protect them from rain.

Animal Sciences

Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
Poultry	All susceptible age groups (as and when required)	Coccidiosis	Give Coximar @ 2g/lit of drinking water for 5-7 days.
		Ranikhet disease	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).
		Management	- Mix deactivated lime powder @ 2 kg per 100 sq. ft. area in litter material to prevent from caking. - Increase energy feed upto 5% (like maize, rice bran, etc.). - Add antibiotic, Hostacycline/ Duaprin @ 2 g/ lit of drinking water for 7 days along with vitamin A, vitamin B & vitamin C.
			As the temperature is becoming low during night time protect birds from cold by using polythene sheet or hessian cloth.
Sheep/ Goat	Above 3 months of age (as and when required)	Ectoparasite	Use Butox liq. @ 2ml/ 4 litres of water and wash the animal with the solution.
		F.M.D.	- Vaccinate against F.M.D.
		Deworming	- Give Albomac suspension @ 5ml per adult.
Pig	Above 3 months of age (as and when required)	Skin infection	Give Ivermectin (Indectin tab.) @ 10mg/33kg body weight.
		Deworming	- Deworm using Piperazine citrate @ 30 ml per adult animal once.
		Ticks	Add Butox liquid @ 2 ml/ lit of water and use the solution twice a week while brushing the animal.
Cattle / Buffalo/ Mithun	Above 3 months of age (as and when required)	Deworming	Deworm using TolzanF @ 100ml/300kg body weight.
		F.M.D.	- Vaccinate against F.M.D.
		Ticks/ Wounds	Topicure spray may be used twice daily on the affected parts.

Fishery:

Type of Farming	Stage & Management	Agro-metrological advisories
Carp/ Catfish culture	Stock maintenance	- Stock fish for next season and for this practices mentioned below may be done in small scale. - Ponds should be free from unwanted vegetation and insects and water depth should be maintained at 1.0 - 1.5 m. - Feeds should be provided 1-2 times a day @ 2-3% body weight per day. - Well balanced feed fortified with vitamins and minerals should be provided. - Apply Green AQ @ 4litre/ ha or lime @ 200kg/ ha. Maintain good quality of pond water.

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



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MANIPUR BULLETIN

9th January, 2015

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 10th to 14th January, 2014 as below:

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During past three days sky was mainly clear to partly cloudy but mainly cloudy during morning hours of 8th Jan, 15. **0.2 mm** rainfall was recorded during past three days. Maximum temperature range observed was 22.4 – 23.5 °C, range of minimum temperature observed was 4.6 – 9.6 °C, mean relative humidity observed in morning and afternoon were 82.67 % and 44.67 % respectively. The average wind speed range was 1.0 – 1.5 km/hr.

Weather forecast for next five days of Imphal-West (10th to 14th January, 2014)

There may be no rain upto Wednesday. Sky will be mainly clear to partly cloudy with maximum temp. of 21.0 – 23.0 °C & minimum temp. 5.0 – 7.0 °C. Relative humidity may reach upto 97 % (maximum RH) & 38 % (minimum RH). The average wind speed may be 4-6 km/ hr during next five days.

Weather Forecast for next 3 days * 0830 hours IST of 12th January, 2014

Fog would occur at many places over Manipur.

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
Field Crops			
Rapeseed/ mustard	Vegetative to flowering	Aphid	- Use yellow plates for every 3 sq.m to attract the aphids or spray Pyrethrum @ 2ml/ litre of water on the infected patches.
		Hairy caterpillar	- Spray Quinalphos or Chloropyriphos @ 2ml/litre of water on the infected patches only .
Pulses (Field pea/ Lentil)	Vegetative	Aphid	- Spray Cypermethrin @2ml/lit of water against aphid on the infected patches only. - For organic control against aphid, sprays that consist of Azadirachtin, Neem oil or Pyrethrin may be used.
Potato	Vegetative		Earthing up may be done when the plant is 15cm high (or 35days old).
		Aphid	- If aphid is observed in small area, wash off it with plain water but if it is severe, spray cypermethrin 20 E.C. @ 1ml/ litre of water or Nuvan @ 0.5ml/litre of water.
		Cut worm	If cut-worm is observed then prepare poison bait of Trichlorfon (mixture of 1kg husk + 40g sugar + 5g Trichlorfon + water) and apply manually by putting near the stem of plant above the soil surface.
Storage			- Clean and store the seeds in RC-seed bins after proper drying of seeds and charcoal. Check for moisture content or weight of seeds. After proper drying, store grains/ seeds in well ventilated godowns.
Horticulture Crops			
Cauliflower, Cabbage & Broccoli	Transplanting		After preparation for transplanting, 850 gm Urea, 2 kg DAP and 1kg MOP along with 40 kg FYM should be incorporated with the soil in an area of 100 m ² and another 850 g Urea may be top dressed at head/ curd formation stage. Transplant at a spacing of 60 cm x 60 cm for hybrid varieties of cabbage (like Rareball, Green Hero) and cauliflower (White Flash, Sweatha).
	Head formation stage to harvesting	Plutella, Daimond, Black Moth	Farmers are advised to spray Dichlorovos 76 EC @ 1ml/ lit of water at 7 days interval.
		Leaf eating caterpillar	Spray Flubendiamide (Fame) @ 2ml/ 10 lit of water.
Cauliflower	Curd formation stage	Whip tail and Chlorosis	- Spray Tracel @ 5g/ litre of water if leaves fail to develop normally/ curl towards the terminal end or chlorosis (whitening/ yellowing of leaves) is observed.
Local cucumber	Land preparation to		- Land preparation for sowing of local cucumber (kalen thabi) may be



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(Kalenthabi)	sowing		started.
Citrus	For nursery	leaf minor	- Spray <i>Monocrotophos</i> @ 0.25-0.5ml/ lit water depending on the age of nursery.
		Leaf eating caterpillar, thrips & mite.	- Spray <i>Confidor</i> @ 0.5 ml/ lit of water.
Ginger/ Turmeric	Harvesting to storage		For storing, prepare pit/ trench. Bottom layer should be covered with river bed soil (20cm thick). Prepare a dry twigs layer on the walls of the pit, put the rhizomes inside the pit and cover the upper surface with dry twigs. Cover the upper layer with the river bed soil. Protect them from rain.

Animal Sciences

Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
Poultry	All susceptible age groups (as and when required)	Coccidiosis	Give Coximar @ 2g/lit of drinking water for 5-7 days.
		Ranikhet disease	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).
		Management	- Mix deactivated lime powder @ 2 kg per 100 sq. ft. area in litter material to prevent from caking. - Increase energy feed upto 5% (like maize, rice bran, etc.). - Add antibiotic, Hostacycline/ Duaprin @ 2 g/ lit of drinking water for 7 days along with vitamin A, vitamin B & vitamin C.
			As the temperature is becoming low during night time protect birds from cold by using polythene sheet or hessian cloth.
Sheep/ Goat	Above 3 months of age (as and when required)	Ectoparasite	Use Butox liq. @ 2ml/ 4 litres of water and wash the animal with the solution.
		F.M.D.	- Vaccinate against F.M.D.
		Deworming	- Give Albomac suspension @ 5ml per adult.
Pig	Above 3 months of age (as and when required)	Skin infection	Give Ivermectin (Indectin tab.) @ 10mg/33kg body weight.
		Deworming	- Deworm using Piperazine citrate @ 30 ml per adult animal once.
		Ticks	Add Butox liquid @ 2 ml/ lit of water and use the solution twice a week while brushing the animal.
Cattle / Buffalo/ Mithun	Above 3 months of age (as and when required)	Deworming	Deworm using TolzanF @ 100ml/300kg body weight.
		F.M.D.	- Vaccinate against F.M.D.
		Ticks/ Wounds	Topicure spray may be used twice daily on the affected parts.

Fishery:

Type of Farming	Stage & Management	Agro-metrological advisories
Carp/ Catfish culture	Stock maintenance	- Stock fish for next season and for this practices mentioned below may be done in small scale. - Ponds should be free from unwanted vegetation and insects and water depth should be maintained at 1.0 - 1.5 m. - Feeds should be provided 1-2 times a day @ 2-3% body weight per day. - Well balanced feed fortified with vitamins and minerals should be provided. - Apply Green AQ @ 4litre/ ha or lime @ 200kg/ ha. Maintain good quality of pond water.

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



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“Integrated Agromet Advisory Services”

MANIPUR BULLETIN

9th January, 2015

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 10th to 14th January, 2014 as below:

Significant past weather for the preceding bi-weekly of Imphal - West (6th to 8th January, 2015)

During past three days sky was mainly clear to partly cloudy but mainly cloudy during morning hours of 8th Jan, 15. **0.2 mm** rainfall was recorded during past three days. Maximum temperature range observed was 22.4 – 23.5 °C, range of minimum temperature observed was 4.6 – 9.6 °C, mean relative humidity observed in morning and afternoon were 82.67 % and 44.67 % respectively. The average wind speed range was 1.0 – 1.5 km/hr.

Weather forecast for next five days of Senapati (10th to 14th January, 2014)

There may be no rain upto Wednesday. Sky will be mainly clear to partly cloudy with maximum temp. of 17.0 – 20.0 °C & minimum temp. 0.0 – 3.0 °C. Relative humidity may reach upto 100 % (maximum RH) & 48 % (minimum RH). The average wind speed may be 2-5 km/ hr during next five days.

Weather Forecast for next 3 days * 0830 hours IST of 12th January, 2014

Fog would occur at many places over Manipur.

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
Field Crops			
Rapeseed/ mustard	Vegetative to flowering	Aphid	- Use yellow plates for every 3 sq.m to attract the aphids or spray Pyrethrum @ 2ml/ litre of water on the infected patches.
		Hairy caterpillar	- Spray Quinalphos or Chloropyriphos @ 2ml/litre of water on the infected patches only .
Pulses (Field pea/ Lentil)	Vegetative	Aphid	- Spray Cypermethrin @2ml/lit of water against aphid on the infected patches only. - For organic control against aphid, sprays that consist of Azadirachtin, Neem oil or Pyrethrin may be used.
Storage			- Clean and store the seeds in RC-seed bins after proper drying of seeds and charcoal. Check for moisture content or weight of seeds. After proper drying, store grains/ seeds in well ventilated godowns.
Horticulture Crops			
Cauliflower, Cabbage & Broccoli	Transplanting		After preparation for transplanting, 850 gm Urea, 2 kg DAP and 1kg MOP along with 40 kg FYM should be incorporated with the soil in an area of 100 m ² and another 850 g Urea may be top dressed at head/ curd formation stage. Transplant at a spacing of 60 cm x 60 cm for hybrid varieties of cabbage (like Rareball, Green Hero) and cauliflower (White Flash, Sweatha).
Citrus	For nursery	leaf minor	- Spray <i>Monocrotophos</i> @ 0.25-0.5ml/ lit water depending on the age of nursery.
		Leaf eating caterpillar, thrips & mite.	- Spray <i>Confidor</i> @ 0.5 ml/ lit of water.
Ginger/ Turmeric	Harvesting to storage		For storing, prepare pit/ trench. Bottom layer should be covered with river bed soil (20cm thick). Prepare a dry twigs layer on the walls of the pit, put the rhizomes inside the pit and cover the upper surface with dry twigs. Cover the upper layer with the river bed soil. Protect them from rain.



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“Integrated Agromet Advisory Services”

Animal Sciences			
Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
Poultry	All susceptible age groups (as and when required)	Coccidiosis	Give Coximar @ 2g/lit of drinking water for 5-7 days.
		Ranikhet disease	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).
		Management	- Mix deactivated lime powder @ 2 kg per 100 sq. ft. area in litter material to prevent from caking. - Increase energy feed upto 5% (like maize, rice bran, etc.). - Add antibiotic, Hostacycline/ Duaprin @ 2 g/ lit of drinking water for 7 days along with vitamin A, vitamin B & vitamin C.
			As the temperature is becoming low during night time protect birds from cold by using polythene sheet or hessian cloth.
Sheep/ Goat	Above 3 months of age (as and when required)	Ectoparasite	Use Butox liq. @ 2ml/ 4 litres of water and wash the animal with the solution.
		F.M.D.	- Vaccinate against F.M.D.
		Deworming	- Give Albomac suspension @ 5ml per adult.
Pig	Above 3 months of age (as and when required)	Skin infection	Give Ivermectin (Indectin tab.) @ 10mg/33kg body weight.
		Deworming	- Deworm using Piperazine citrate @ 30 ml per adult animal once.
		Ticks	Add Butox liquid @ 2 ml/ lit of water and use the solution twice a week while brushing the animal.
Cattle / Buffalo/ Mithun	Above 3 months of age (as and when required)	Deworming	Deworm using TolzanF @ 100ml/300kg body weight.
		F.M.D.	- Vaccinate against F.M.D.
		Ticks/ Wounds	Topicure spray may be used twice daily on the affected parts.
Fishery:			
Type of Farming	Stage & Management	Agro-metrological advisories	
Carp/ Catfish culture	Stock maintenance	<ul style="list-style-type: none">- Stock fish for next season and for this practices mentioned below may be done in small scale.- Ponds should be free from unwanted vegetation and insects and water depth should be maintained at 1.0 - 1.5 m.- Feeds should be provided 1-2 times a day @ 2-3% body weight per day.- Well balanced feed fortified with vitamins and minerals should be provided.- Apply Green AQ @ 4litre/ ha or lime @ 200kg/ ha. Maintain good quality of pond water.	

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



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MANIPUR BULLETIN

9th January, 2015

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 10th to 14th January, 2014 as below:

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During past three days sky was mainly clear to partly cloudy but mainly cloudy during morning hours of 8th Jan, 15. **0.2 mm** rainfall was recorded during past three days. Maximum temperature range observed was 22.4 – 23.5 °C, range of minimum temperature observed was 4.6 – 9.6 °C, mean relative humidity observed in morning and afternoon were 82.67 % and 44.67 % respectively. The average wind speed range was 1.0 – 1.5 km/hr.

Weather forecast for next five days of Tamenglong (10th to 14th January, 2014)

There may be no rain upto Wednesday. Sky will be mainly clear to partly cloudy with maximum temp. of 25.0 – 27.0 °C & minimum temp. 3.0 – 6.0 °C. Relative humidity may reach upto 97 % (maximum RH) & 37 % (minimum RH). The average wind speed may be 5-7 km/ hr during next five days.

Weather Forecast for next 3 days * 0830 hours IST of 12th January, 2014

Fog would occur at many places over Manipur.

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
Field Crops			
Rapeseed/ mustard	Vegetative to flowering	Aphid	- Use yellow plates for every 3 sq.m to attract the aphids or spray Pyrethrum @ 2ml/ litre of water on the infected patches.
		Hairy caterpillar	- Spray Quinalphos or Chloropyriphos @ 2ml/litre of water on the infected patches only .
Pulses (Field pea/ Lentil)	Vegetative	Aphid	- Spray Cypermethrin @2ml/lit of water against aphid on the infected patches only. - For organic control against aphid, sprays that consist of Azadirachtin, Neem oil or Pyrethrin may be used.
Potato	Vegetative		Earthing up may be done when the plant is 15cm high (or 35days old).
		Aphid	- If aphid is observed in small area, wash off it with plain water but if it is severe, spray cypermethrin 20 E.C. @ 1ml/ litre of water or Nuvan @ 0.5ml/litre of water.
		Cut worm	If cut-worm is observed then prepare poison bait of Trichlorfon (mixture of 1kg husk + 40g sugar + 5g Trichlorfon + water) and apply manually by putting near the stem of plant above the soil surface.
Storage			- Clean and store the seeds in RC-seed bins after proper drying of seeds and charcoal. Check for moisture content or weight of seeds. After proper drying, store grains/ seeds in well ventilated godowns.
Horticulture Crops			
Cauliflower, Cabbage & Broccoli	Transplanting		After preparation for transplanting, 850 gm Urea, 2 kg DAP and 1kg MOP along with 40 kg FYM should be incorporated with the soil in an area of 100 m ² and another 850 g Urea may be top dressed at head/ curd formation stage. Transplant at a spacing of 60 cm x 60 cm for hybrid varieties of cabbage (like Rareball, Green Hero) and cauliflower (White Flash, Sweatha).
	Head formation stage to harvesting	Plutella, Daimond, Black Moth	Farmers are advised to spray Dichlorovos 76 EC @ 1ml/ lit of water at 7 days interval.
		Leaf eating caterpillar	Spray Flubendiamide (Fame) @ 2ml/ 10 lit of water.
Cauliflower	Curd formation stage	Whip tail and Chlorosis	- Spray Tracel @ 5g/ litre of water if leaves fail to develop normally/ curl towards the terminal end or chlorosis (whitening/ yellowing of leaves) is observed.
Local cucumber	Land preparation to		- Land preparation for sowing of local cucumber (kalen thabi) may be



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



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(Kalenthabi)	sowing		started.
Citrus	For nursery	leaf minor	- Spray <i>Monocrotophos</i> @ 0.25-0.5ml/ lit water depending on the age of nursery.
		Leaf eating caterpillar, thrips & mite.	- Spray <i>Confidor</i> @ 0.5 ml/ lit of water.
Ginger/ Turmeric	Harvesting to storage		For storing, prepare pit/ trench. Bottom layer should be covered with river bed soil (20cm thick). Prepare a dry twigs layer on the walls of the pit, put the rhizomes inside the pit and cover the upper surface with dry twigs. Cover the upper layer with the river bed soil. Protect them from rain.

Animal Sciences

Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
Poultry	All susceptible age groups (as and when required)	Coccidiosis	Give Coximar @ 2g/lit of drinking water for 5-7 days.
		Ranikhet disease	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).
		Management	- Mix deactivated lime powder @ 2 kg per 100 sq. ft. area in litter material to prevent from caking. - Increase energy feed upto 5% (like maize, rice bran, etc.). - Add antibiotic, Hostacycline/ Duaprin @ 2 g/ lit of drinking water for 7 days along with vitamin A, vitamin B & vitamin C.
			As the temperature is becoming low during night time protect birds from cold by using polythene sheet or hessian cloth.
Sheep/ Goat	Above 3 months of age (as and when required)	Ectoparasite	Use Butox liq. @ 2ml/ 4 litres of water and wash the animal with the solution.
		F.M.D.	- Vaccinate against F.M.D.
		Deworming	- Give Albomac suspension @ 5ml per adult.
Pig	Above 3 months of age (as and when required)	Skin infection	Give Ivermectin (Indectin tab.) @ 10mg/33kg body weight.
		Deworming	- Deworm using Piperazine citrate @ 30 ml per adult animal once.
		Ticks	Add Butox liquid @ 2 ml/ lit of water and use the solution twice a week while brushing the animal.
Cattle / Buffalo/ Mithun	Above 3 months of age (as and when required)	Deworming	Deworm using TolzanF @ 100ml/300kg body weight.
		F.M.D.	- Vaccinate against F.M.D.
		Ticks/ Wounds	Topicure spray may be used twice daily on the affected parts.

Fishery:

Type of Farming	Stage & Management	Agro-metrological advisories
Carp/ Catfish culture	Stock maintenance	- Stock fish for next season and for this practices mentioned below may be done in small scale. - Ponds should be free from unwanted vegetation and insects and water depth should be maintained at 1.0 - 1.5 m. - Feeds should be provided 1-2 times a day @ 2-3% body weight per day. - Well balanced feed fortified with vitamins and minerals should be provided. - Apply Green AQ @ 4litre/ ha or lime @ 200kg/ ha. Maintain good quality of pond water.

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



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



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MANIPUR BULLETIN

9th January, 2015

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 10th to 14th January, 2014 as below:

Significant past weather for the preceding bi-weekly of Imphal - West (6th to 8th January, 2015)

During past three days sky was mainly clear to partly cloudy but mainly cloudy during morning hours of 8th Jan, 15. **0.2 mm** rainfall was recorded during past three days. Maximum temperature range observed was 22.4 – 23.5 °C, range of minimum temperature observed was 4.6 – 9.6 °C, mean relative humidity observed in morning and afternoon were 82.67 % and 44.67 % respectively. The average wind speed range was 1.0 – 1.5 km/hr.

Weather forecast for next five days of Thoubal (10th to 14th January, 2014)

There may be no rain upto Wednesday. Sky will be mainly clear to partly cloudy with maximum temp. of 19.0 – 21.0 °C & minimum temp. 1.0 – 3.0 °C. Relative humidity may reach upto 100 % (maximum RH) & 43 % (minimum RH). The average wind speed may be 2 km/ hr during next five days.

Weather Forecast for next 3 days * 0830 hours IST of 12th January, 2014

Fog would occur at many places over Manipur.

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
Field Crops			
Rapeseed/ mustard	Vegetative to flowering	Aphid	- Use yellow plates for every 3 sq.m to attract the aphids or spray Pyrethrum @ 2ml/ litre of water on the infected patches.
		Hairy caterpillar	- Spray Quinalphos or Chloropyriphos @ 2ml/litre of water on the infected patches only .
Pulses (Field pea/ Lentil)	Vegetative	Aphid	- Spray Cypermethrin @2ml/lit of water against aphid on the infected patches only. - For organic control against aphid, sprays that consist of Azadirachtin, Neem oil or Pyrethrin may be used.
Potato	Vegetative		Earthing up may be done when the plant is 15cm high (or 35days old).
		Aphid	- If aphid is observed in small area, wash off it with plain water but if it is severe, spray cypermethrin 20 E.C. @ 1ml/ litre of water or Nuvan @ 0.5ml/litre of water.
		Cut worm	If cut-worm is observed then prepare poison bait of Trichlorfon (mixture of 1kg husk + 40g sugar + 5g Trichlorfon + water) and apply manually by putting near the stem of plant above the soil surface.
Storage			- Clean and store the seeds in RC-seed bins after proper drying of seeds and charcoal. Check for moisture content or weight of seeds. After proper drying, store grains/ seeds in well ventilated godowns.
Horticulture Crops			
Cauliflower, Cabbage & Broccoli	Transplanting		After preparation for transplanting, 850 gm Urea, 2 kg DAP and 1kg MOP along with 40 kg FYM should be incorporated with the soil in an area of 100 m ² and another 850 g Urea may be top dressed at head/ curd formation stage. Transplant at a spacing of 60 cm x 60 cm for hybrid varieties of cabbage (like Rareball, Green Hero) and cauliflower (White Flash, Sweatha).
	Head formation stage to harvesting	Plutella, Daimond, Black Moth	Farmers are advised to spray Dichlorovos 76 EC @ 1ml/ lit of water at 7 days interval.
		Leaf eating caterpillar	Spray Flubendiamide (Fame) @ 2ml/ 10 lit of water.
Cauliflower	Curd formation stage	Whip tail and Chlorosis	- Spray Tracel @ 5g/ litre of water if leaves fail to develop normally/ curl towards the terminal end or chlorosis (whitening/ yellowing of leaves) is observed.
Local cucumber	Land preparation to		- Land preparation for sowing of local cucumber (kalen thabi) may be



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



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(Kalenthabi)	sowing		started.
Citrus	For nursery	leaf minor	- Spray <i>Monocrotophos</i> @ 0.25-0.5ml/ lit water depending on the age of nursery.
		Leaf eating caterpillar, thrips & mite.	- Spray <i>Confidor</i> @ 0.5 ml/ lit of water.
Ginger/ Turmeric	Harvesting to storage		For storing, prepare pit/ trench. Bottom layer should be covered with river bed soil (20cm thick). Prepare a dry twigs layer on the walls of the pit, put the rhizomes inside the pit and cover the upper surface with dry twigs. Cover the upper layer with the river bed soil. Protect them from rain.

Animal Sciences

Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
Poultry	All susceptible age groups (as and when required)	Coccidiosis	Give Coximar @ 2g/lit of drinking water for 5-7 days.
		Ranikhet disease	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).
		Management	- Mix deactivated lime powder @ 2 kg per 100 sq. ft. area in litter material to prevent from caking. - Increase energy feed upto 5% (like maize, rice bran, etc.). - Add antibiotic, Hostacycline/ Duaprin @ 2 g/ lit of drinking water for 7 days along with vitamin A, vitamin B & vitamin C.
			As the temperature is becoming low during night time protect birds from cold by using polythene sheet or hessian cloth.
Sheep/ Goat	Above 3 months of age (as and when required)	Ectoparasite	Use Butox liq. @ 2ml/ 4 litres of water and wash the animal with the solution.
		F.M.D.	- Vaccinate against F.M.D.
		Deworming	- Give Albomac suspension @ 5ml per adult.
Pig	Above 3 months of age (as and when required)	Skin infection	Give Ivermectin (Indectin tab.) @ 10mg/33kg body weight.
		Deworming	- Deworm using Piperazine citrate @ 30 ml per adult animal once.
		Ticks	Add Butox liquid @ 2 ml/ lit of water and use the solution twice a week while brushing the animal.
Cattle / Buffalo/ Mithun	Above 3 months of age (as and when required)	Deworming	Deworm using TolzanF @ 100ml/300kg body weight.
		F.M.D.	- Vaccinate against F.M.D.
		Ticks/ Wounds	Topicure spray may be used twice daily on the affected parts.

Fishery:

Type of Farming	Stage & Management	Agro-metrological advisories
Carp/ Catfish culture	Stock maintenance	- Stock fish for next season and for this practices mentioned below may be done in small scale. - Ponds should be free from unwanted vegetation and insects and water depth should be maintained at 1.0 - 1.5 m. - Feeds should be provided 1-2 times a day @ 2-3% body weight per day. - Well balanced feed fortified with vitamins and minerals should be provided. - Apply Green AQ @ 4litre/ ha or lime @ 200kg/ ha. Maintain good quality of pond water.

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



“Integrated Agromet Advisory Services”

MANIPUR BULLETIN

9th January, 2015

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 10th to 14th January, 2014 as below:

Significant past weather for the preceding bi-weekly of Imphal - West (6th to 8th January, 2015)

During past three days sky was mainly clear to partly cloudy but mainly cloudy during morning hours of 8th Jan, 15. **0.2 mm** rainfall was recorded during past three days. Maximum temperature range observed was 22.4 – 23.5 °C, range of minimum temperature observed was 4.6 – 9.6 °C, mean relative humidity observed in morning and afternoon were 82.67 % and 44.67 % respectively. The average wind speed range was 1.0 – 1.5 km/hr.

Weather forecast for next five days of Ukhrul (10th to 14th January, 2014)

There may be no rain upto Wednesday. Sky will be mainly clear to partly cloudy with maximum temp. of 17.0 – 20.0 °C & minimum temp. 0.0 – 3.0 °C. Relative humidity may reach upto 99 % (maximum RH) & 46 % (minimum RH). The average wind speed may be 2-5 km/ hr during next five days.

Weather Forecast for next 3 days * 0830 hours IST of 12th January, 2014

Fog would occur at many places over Manipur.

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
Field Crops			
Rapeseed/ mustard	Vegetative to flowering	Aphid	- Use yellow plates for every 3 sq.m to attract the aphids or spray Pyrethrum @ 2ml/ litre of water on the infected patches.
		Hairy caterpillar	- Spray Quinalphos or Chloropyriphos @ 2ml/litre of water on the infected patches only .
Pulses (Field pea/ Lentil)	Vegetative	Aphid	- Spray Cypermethrin @2ml/lit of water against aphid on the infected patches only. - For organic control against aphid, sprays that consist of Azadirachtin, Neem oil or Pyrethrin may be used.
Storage			- Clean and store the seeds in RC-seed bins after proper drying of seeds and charcoal. Check for moisture content or weight of seeds. After proper drying, store grains/ seeds in well ventilated godowns.
Horticulture Crops			
Cauliflower, Cabbage & Broccoli	Transplanting		After preparation for transplanting, 850 gm Urea, 2 kg DAP and 1kg MOP along with 40 kg FYM should be incorporated with the soil in an area of 100 m ² and another 850 g Urea may be top dressed at head/ curd formation stage. Transplant at a spacing of 60 cm x 60 cm for hybrid varieties of cabbage (like Rareball, Green Hero) and cauliflower (White Flash, Sweatha).
Citrus	For nursery	leaf minor	- Spray <i>Monocrotophos</i> @ 0.25-0.5ml/ lit water depending on the age of nursery.
		Leaf eating caterpillar, thrips & mite.	- Spray <i>Confidor</i> @ 0.5 ml/ lit of water.
Ginger/ Turmeric	Harvesting to storage		For storing, prepare pit/ trench. Bottom layer should be covered with river bed soil (20cm thick). Prepare a dry twigs layer on the walls of the pit, put the rhizomes inside the pit and cover the upper surface with dry twigs. Cover the upper layer with the river bed soil. Protect them from rain.



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



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Animal Sciences			
Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
Poultry	All susceptible age groups (as and when required)	Coccidiosis	Give Coximar @ 2g/lit of drinking water for 5-7 days.
		Ranikhet disease	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).
		Management	- Mix deactivated lime powder @ 2 kg per 100 sq. ft. area in litter material to prevent from caking. - Increase energy feed upto 5% (like maize, rice bran, etc.). - Add antibiotic, Hostacycline/ Duaprin @ 2 g/ lit of drinking water for 7 days along with vitamin A, vitamin B & vitamin C.
			As the temperature is becoming low during night time protect birds from cold by using polythene sheet or hessian cloth.
Sheep/ Goat	Above 3 months of age (as and when required)	Ectoparasite	Use Butox liq. @ 2ml/ 4 litres of water and wash the animal with the solution.
		F.M.D.	- Vaccinate against F.M.D.
		Deworming	- Give Albomac suspension @ 5ml per adult.
Pig	Above 3 months of age (as and when required)	Skin infection	Give Ivermectin (Indectin tab.) @ 10mg/33kg body weight.
		Deworming	- Deworm using Piperazine citrate @ 30 ml per adult animal once.
		Ticks	Add Butox liquid @ 2 ml/ lit of water and use the solution twice a week while brushing the animal.
Cattle / Buffalo/ Mithun	Above 3 months of age (as and when required)	Deworming	Deworm using TolzanF @ 100ml/300kg body weight.
		F.M.D.	- Vaccinate against F.M.D.
		Ticks/ Wounds	Topicure spray may be used twice daily on the affected parts.
Fishery:			
Type of Farming	Stage & Management	Agro-metrological advisories	
Carp/ Catfish culture	Stock maintenance	<ul style="list-style-type: none">- Stock fish for next season and for this practices mentioned below may be done in small scale.- Ponds should be free from unwanted vegetation and insects and water depth should be maintained at 1.0 - 1.5 m.- Feeds should be provided 1-2 times a day @ 2-3% body weight per day.- Well balanced feed fortified with vitamins and minerals should be provided.- Apply Green AQ @ 4litre/ ha or lime @ 200kg/ ha. Maintain good quality of pond water.	

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



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



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MANIPUR BULLETIN

9th January, 2015

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 10th to 14th January, 2014 as below:

Significant past weather for the preceding bi-weekly of Imphal - West (6th to 8th January, 2015)

During past three days sky was mainly clear to partly cloudy but mainly cloudy during morning hours of 8th Jan. 15. **0.2 mm** rainfall was recorded during past three days. Maximum temperature range observed was 22.4 – 23.5 °C, range of minimum temperature observed was 4.6 – 9.6 °C, mean relative humidity observed in morning and afternoon were 82.67 % and 44.67 % respectively. The average wind speed range was 1.0 – 1.5 km/hr.

Weather forecast for next five days of Bishnupur (10th to 14th January, 2014)

There may be no rain upto Wednesday. Sky will be mainly clear to partly cloudy with maximum temp. of 20.0 – 23.0 °C & minimum temp. 3.0 – 7.0 °C. Relative humidity may reach upto 100 % (maximum RH) & 40 % (minimum RH). The average wind speed may be 2-6 km/ hr during next five days.

Weather Forecast for next 3 days * 0830 hours IST of 12th January, 2014

Fog would occur at many places over Manipur.

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
Field Crops			
Rapeseed/ mustard	Vegetative to flowering	Aphid	- Use yellow plates for every 3 sq.m to attract the aphids or spray Pyrethrum @ 2ml/ litre of water on the infected patches.
		Hairy caterpillar	- Spray Quinalphos or Chloropyriphos @ 2ml/litre of water on the infected patches only .
Pulses (Field pea/ Lentil)	Vegetative	Aphid	- Spray Cypermethrin @2ml/lit of water against aphid on the infected patches only. - For organic control against aphid, sprays that consist of Azadirachtin, Neem oil or Pyrethrin may be used.
Potato	Vegetative		Earthing up may be done when the plant is 15cm high (or 35days old).
		Aphid	- If aphid is observed in small area, wash off it with plain water but if it is severe, spray cypermethrin 20 E.C. @ 1ml/ litre of water or Nuvan @ 0.5ml/litre of water.
		Cut worm	If cut-worm is observed then prepare poison bait of Trichlorfon (mixture of 1kg husk + 40g sugar + 5g Trichlorfon + water) and apply manually by putting near the stem of plant above the soil surface.
Storage			- Clean and store the seeds in RC-seed bins after proper drying of seeds and charcoal. Check for moisture content or weight of seeds. After proper drying, store grains/ seeds in well ventilated godowns.
Horticulture Crops			
Cauliflower, Cabbage & Broccoli	Transplanting		After preparation for transplanting, 850 gm Urea, 2 kg DAP and 1kg MOP along with 40 kg FYM should be incorporated with the soil in an area of 100 m ² and another 850 g Urea may be top dressed at head/ curd formation stage. Transplant at a spacing of 60 cm x 60 cm for hybrid varieties of cabbage (like Rareball, Green Hero) and cauliflower (White Flash, Sweatha).
	Head formation stage to harvesting	Plutella, Daimond, Black Moth	Farmers are advised to spray Dichlorovos 76 EC @ 1ml/ lit of water at 7 days interval.
		Leaf eating caterpillar	Spray Flubendiamide (Fame) @ 2ml/ 10 lit of water.
Cauliflower	Curd formation stage	Whip tail and Chlorosis	- Spray Tracel @ 5g/ litre of water if leaves fail to develop normally/ curl towards the terminal end or chlorosis (whitening/ yellowing of leaves) is observed.
Local cucumber	Land preparation to		- Land preparation for sowing of local cucumber (kalen thabi) may be



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



“Integrated Agromet Advisory Services”

(Kalenthabi)	sowing		started.
Citrus	For nursery	leaf minor	- Spray <i>Monocrotophos</i> @ 0.25-0.5ml/ lit water depending on the age of nursery.
		Leaf eating caterpillar, thrips & mite.	- Spray <i>Confidor</i> @ 0.5 ml/ lit of water.
Ginger/ Turmeric	Harvesting to storage		For storing, prepare pit/ trench. Bottom layer should be covered with river bed soil (20cm thick). Prepare a dry twigs layer on the walls of the pit, put the rhizomes inside the pit and cover the upper surface with dry twigs. Cover the upper layer with the river bed soil. Protect them from rain.

Animal Sciences

Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
Poultry	All susceptible age groups (as and when required)	Coccidiosis	Give Coximar @ 2g/lit of drinking water for 5-7 days.
		Ranikhet disease	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).
		Management	- Mix deactivated lime powder @ 2 kg per 100 sq. ft. area in litter material to prevent from caking. - Increase energy feed upto 5% (like maize, rice bran, etc.). - Add antibiotic, Hostacycline/ Duaprin @ 2 g/ lit of drinking water for 7 days along with vitamin A, vitamin B & vitamin C.
			As the temperature is becoming low during night time protect birds from cold by using polythene sheet or hessian cloth.
Sheep/ Goat	Above 3 months of age (as and when required)	Ectoparasite	Use Butox liq. @ 2ml/ 4 litres of water and wash the animal with the solution.
		F.M.D.	- Vaccinate against F.M.D.
		Deworming	- Give Albomac suspension @ 5ml per adult.
Pig	Above 3 months of age (as and when required)	Skin infection	Give Ivermectin (Indectin tab.) @ 10mg/33kg body weight.
		Deworming	- Deworm using Piperazine citrate @ 30 ml per adult animal once.
		Ticks	Add Butox liquid @ 2 ml/ lit of water and use the solution twice a week while brushing the animal.
Cattle / Buffalo/ Mithun	Above 3 months of age (as and when required)	Deworming	Deworm using TolzanF @ 100ml/300kg body weight.
		F.M.D.	- Vaccinate against F.M.D.
		Ticks/ Wounds	Topicure spray may be used twice daily on the affected parts.

Fishery:

Type of Farming	Stage & Management	Agro-metrological advisories
Carp/ Catfish culture	Stock maintenance	- Stock fish for next season and for this practices mentioned below may be done in small scale. - Ponds should be free from unwanted vegetation and insects and water depth should be maintained at 1.0 - 1.5 m. - Feeds should be provided 1-2 times a day @ 2-3% body weight per day. - Well balanced feed fortified with vitamins and minerals should be provided. - Apply Green AQ @ 4litre/ ha or lime @ 200kg/ ha. Maintain good quality of pond water.

(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

9th January, 2015

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 10th to 14th January, 2014 as below:

Significant past weather for the preceding bi-weekly of Imphal - West (6th to 8th January, 2015)

During past three days sky was mainly clear to partly cloudy but mainly cloudy during morning hours of 8th Jan, 15. **0.2 mm** rainfall was recorded during past three days. Maximum temperature range observed was 22.4 – 23.5 °C, range of minimum temperature observed was 4.6 – 9.6 °C, mean relative humidity observed in morning and afternoon were 82.67 % and 44.67 % respectively. The average wind speed range was 1.0 – 1.5 km/hr.

Weather forecast for next five days of Chandel (10th to 14th January, 2014)

There may be no rain upto Wednesday. Sky will be mainly clear to partly cloudy with maximum temp. of 23.0 – 25.0 °C & minimum temp. 7.0 – 8.0 °C. Relative humidity may reach upto 98 % (maximum RH) & 48 % (minimum RH). The average wind speed may be 3-4 km/ hr during next five days.

Weather Forecast for next 3 days * 0830 hours IST of 12th January, 2014

Fog would occur at many places over Manipur.

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
Field Crops			
Rapeseed/ mustard	Vegetative to flowering	Aphid	- Use yellow plates for every 3 sq.m to attract the aphids or spray Pyrethrum @ 2ml/ litre of water on the infected patches.
		Hairy caterpillar	- Spray Quinalphos or Chloropyriphos @ 2ml/litre of water on the infected patches only .
Pulses (Field pea/ Lentil)	Vegetative	Aphid	- Spray Cypermethrin @2ml/lit of water against aphid on the infected patches only. - For organic control against aphid, sprays that consist of Azadirachtin, Neem oil or Pyrethrin may be used.
Potato	Vegetative		Earthing up may be done when the plant is 15cm high (or 35days old).
		Aphid	- If aphid is observed in small area, wash off it with plain water but if it is severe, spray cypermethrin 20 E.C. @ 1ml/ litre of water or Nuvan @ 0.5ml/litre of water.
		Cut worm	If cut-worm is observed then prepare poison bait of Trichlorfon (mixture of 1kg husk + 40g sugar + 5g Trichlorfon + water) and apply manually by putting near the stem of plant above the soil surface.
Storage			- Clean and store the seeds in RC-seed bins after proper drying of seeds and charcoal. Check for moisture content or weight of seeds. After proper drying, store grains/ seeds in well ventilated godowns.
Horticulture Crops			
Cauliflower, Cabbage & Broccoli	Transplanting		After preparation for transplanting, 850 gm Urea, 2 kg DAP and 1kg MOP along with 40 kg FYM should be incorporated with the soil in an area of 100 m ² and another 850 g Urea may be top dressed at head/ curd formation stage. Transplant at a spacing of 60 cm x 60 cm for hybrid varieties of cabbage (like Rareball, Green Hero) and cauliflower (White Flash, Sweatha).
	Head formation stage to harvesting	Plutella, Daimond, Black Moth	Farmers are advised to spray Dichlorovos 76 EC @ 1ml/ lit of water at 7 days interval.
		Leaf eating caterpillar	Spray Flubendiamide (Fame) @ 2ml/ 10 lit of water.
Cauliflower	Curd formation stage	Whip tail and Chlorosis	- Spray Tracel @ 5g/ litre of water if leaves fail to develop normally/ curl towards the terminal end or chlorosis (whitening/ yellowing of leaves) is observed.
Local cucumber	Land preparation to		- Land preparation for sowing of local cucumber (kalen thabi) may be



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“Integrated Agromet Advisory Services”

(Kalenthabi)	sowing		started.
Citrus	For nursery	leaf minor	- Spray <i>Monocrotophos</i> @ 0.25-0.5ml/ lit water depending on the age of nursery.
		Leaf eating caterpillar, thrips & mite.	- Spray <i>Confidor</i> @ 0.5 ml/ lit of water.
Ginger/ Turmeric	Harvesting to storage		For storing, prepare pit/ trench. Bottom layer should be covered with river bed soil (20cm thick). Prepare a dry twigs layer on the walls of the pit, put the rhizomes inside the pit and cover the upper surface with dry twigs. Cover the upper layer with the river bed soil. Protect them from rain.

Animal Sciences

Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
Poultry	All susceptible age groups (as and when required)	Coccidiosis	Give Coximar @ 2g/lit of drinking water for 5-7 days.
		Ranikhet disease	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).
		Management	- Mix deactivated lime powder @ 2 kg per 100 sq. ft. area in litter material to prevent from caking. - Increase energy feed upto 5% (like maize, rice bran, etc.). - Add antibiotic, Hostacycline/ Duaprin @ 2 g/ lit of drinking water for 7 days along with vitamin A, vitamin B & vitamin C.
			As the temperature is becoming low during night time protect birds from cold by using polythene sheet or hessian cloth.
Sheep/ Goat	Above 3 months of age (as and when required)	Ectoparasite	Use Butox liq. @ 2ml/ 4 litres of water and wash the animal with the solution.
		F.M.D.	- Vaccinate against F.M.D.
		Deworming	- Give Albomac suspension @ 5ml per adult.
Pig	Above 3 months of age (as and when required)	Skin infection	Give Ivermectin (Indectin tab.) @ 10mg/33kg body weight.
		Deworming	- Deworm using Piperazine citrate @ 30 ml per adult animal once.
		Ticks	Add Butox liquid @ 2 ml/ lit of water and use the solution twice a week while brushing the animal.
Cattle / Buffalo/ Mithun	Above 3 months of age (as and when required)	Deworming	Deworm using TolzanF @ 100ml/300kg body weight.
		F.M.D.	- Vaccinate against F.M.D.
		Ticks/ Wounds	Topicure spray may be used twice daily on the affected parts.

Fishery:

Type of Farming	Stage & Management	Agro-metrological advisories
Carp/ Catfish culture	Stock maintenance	- Stock fish for next season and for this practices mentioned below may be done in small scale. - Ponds should be free from unwanted vegetation and insects and water depth should be maintained at 1.0 - 1.5 m. - Feeds should be provided 1-2 times a day @ 2-3% body weight per day. - Well balanced feed fortified with vitamins and minerals should be provided. - Apply Green AQ @ 4litre/ ha or lime @ 200kg/ ha. Maintain good quality of pond water.

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