



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



“Integrated Agromet Advisory Services”

MANIPUR BULLETIN

2nd 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 3rd to 7th January, 2014 as below:

Significant past weather for the preceding bi-weekly of Imphal - West (30th December, 2014 to 1st January, 2015)

During past three days sky was partly cloudy to cloudy. No rainfall was recorded during past three days. Maximum temperature range observed was 21.2 – 22.7 °C, range of minimum temperature observed was 6.9 – 13.0 °C, mean relative humidity observed in morning and afternoon were 90.0 % and 60.7 % respectively. The average wind speed range was 0.7 – 0.9 km/hr.

Weather forecast for next five days of Churachandpur (3rd to 7th January, 2014)

There may be light rain at isolated places on Sunday. Sky will be mainly clear to partly cloudy with maximum temp. of 21.0 – 24.0 °C & minimum temp. 5.0 – 9.0 °C. Relative humidity may reach upto 100 % (maximum RH) & 76 % (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 5th January, 2014

Fog would occur at many places over Manipur.

Weather Outlook for subsequent 4 days from 05th January 2015 to 09th January 2015

Rain/thundershowers would occur at a few places over northeast

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
Field Crops			
Rapeseed/ mustard	Vegetative to flowering	Aphid	- If facility is available give irrigation to keep soil moist. - 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		- If facility is available give irrigation to keep soil moist during vegetative stage for better yield.
		Aphid	- Spray Cypermethrin @2ml/lit of water or Nuvan @ 0.5ml/ 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		- Give light irrigation to attain optimum soil moisture.
		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.
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, Sweetha).
	Head formation stage to harvesting	Plutella, Diamond, 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.



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Local cucumber (Kalenthabi)	Land preparation to sowing		- Land preparation for sowing of local cucumber (kalen thabi) may be 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.

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

2nd 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 3rd to 7th January, 2014 as below:

Significant past weather for the preceding bi-weekly of Imphal - West (30th December, 2014 to 1st January, 2015)

During past three days sky was partly cloudy to cloudy. No rainfall was recorded during past three days. Maximum temperature range observed was 21.2 – 22.7 °C, range of minimum temperature observed was 6.9 – 13.0 °C, mean relative humidity observed in morning and afternoon were 90.0 % and 60.7 % respectively. The average wind speed range was 0.7 – 0.9 km/hr.

Weather forecast for next five days of Imphal-East (3rd to 7th January, 2014)

There may be light rain at isolated places on Sunday. Sky will be mainly clear to partly cloudy with maximum temp. of 22.0 – 24.0 °C & minimum temp. 6.0 – 10.0 °C. Relative humidity may reach upto 100 % (maximum RH) & 70 % (minimum RH). The average wind speed may be 0-2 km/ hr during next five days.

Weather Forecast for next 3 days * 0830 hours IST of 5th January, 2014

Fog would occur at many places over Manipur.

Weather Outlook for subsequent 4 days from 05th January 2015 to 09th January 2015

Rain/thundershowers would occur at a few places over northeast

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
Field Crops			
Rapeseed/ mustard	Vegetative to flowering	Aphid	- If facility is available give irrigation to keep soil moist. - 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		- If facility is available give irrigation to keep soil moist during vegetative stage for better yield.
		Aphid	- Spray Cypermethrin @2ml/lit of water or Nuvan @ 0.5ml/ 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		- Give light irrigation to attain optimum soil moisture.
		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.
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, Sweetha).
	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.



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“Integrated Agromet Advisory Services”

Local cucumber (Kalenhabhi)	Land preparation to sowing		- Land preparation for sowing of local cucumber (kalen habhi) may be 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.

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

2nd 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 3rd to 7th January, 2014 as below:

Significant past weather for the preceding bi-weekly of Imphal - West (30th December, 2014 to 1st January, 2015)

During past three days sky was partly cloudy to cloudy. No rainfall was recorded during past three days. Maximum temperature range observed was 21.2 – 22.7 °C, range of minimum temperature observed was 6.9 – 13.0 °C, mean relative humidity observed in morning and afternoon were 90.0 % and 60.7 % respectively. The average wind speed range was 0.7 – 0.9 km/hr.

Weather forecast for next five days of Imphal-West (3rd to 7th January, 2014)

There may be light rain at isolated places on Sunday. Sky will be mainly clear to partly cloudy with maximum temp. of 22.0 – 25.0 °C & minimum temp. 6.0 – 10.0 °C. Relative humidity may reach upto 100 % (maximum RH) & 66 % (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 5th January, 2014

Fog would occur at many places over Manipur.

Weather Outlook for subsequent 4 days from 05th January 2015 to 09th January 2015

Rain/thundershowers would occur at a few places over northeast

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
Field Crops			
Rapeseed/ mustard	Vegetative to flowering	Aphid	- If facility is available give irrigation to keep soil moist. - 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		- If facility is available give irrigation to keep soil moist during vegetative stage for better yield.
		Aphid	- Spray Cypermethrin @2ml/lit of water or Nuvan @ 0.5ml/ 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		- Give light irrigation to attain optimum soil moisture.
		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.
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, Sweetha).
	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.



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“Integrated Agromet Advisory Services”

Local cucumber (Kalenhabhi)	Land preparation to sowing		- Land preparation for sowing of local cucumber (kalen thabi) may be 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.

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

2nd 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 3rd to 7th January, 2014 as below:

<p>Significant past weather for the preceding bi-weekly of Imphal - West (30th December, 2014 to 1st January, 2015) During past three days sky was partly cloudy to cloudy. No rainfall was recorded during past three days. Maximum temperature range observed was 21.2 – 22.7 °C, range of minimum temperature observed was 6.9 – 13.0 °C, mean relative humidity observed in morning and afternoon were 90.0 % and 60.7 % respectively. The average wind speed range was 0.7 – 0.9 km/hr.</p>	<p>Weather forecast for next five days of Senapati (3rd to 7th January, 2014) There may be light rain at isolated places on Sunday. Sky will be mainly clear to partly cloudy with maximum temp. of 19.0 – 23.0 °C & minimum temp. 3.0 – 7.0 °C. Relative humidity may reach upto 100 % (maximum RH) & 66 % (minimum RH). The average wind speed may be 0-2 km/hr during next five days.</p>
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Weather Forecast for next 3 days * 0830 hours IST of 5th January, 2014

Fog would occur at many places over Manipur.

Weather Outlook for subsequent 4 days from 05th January 2015 to 09th January 2015

Rain/thundershowers would occur at a few places over northeast

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
Field Crops			
Rapeseed/ mustard	Vegetative to flowering		- If facility is available give irrigation to keep soil moist.
		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		- If facility is available give irrigation to keep soil moist during vegetative stage for better yield.
		Aphid	- Spray Cypermethrin @2ml/lit of water or Nuvan @ 0.5ml/ 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.
		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.
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, Sweetha).
	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.



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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.

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

2nd 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 3rd to 7th January, 2014 as below:

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Weather forecast for next five days of Tamenglong (3rd to 7th January, 2014)

There may be light rain at isolated places on Sunday. Sky will be mainly clear to partly cloudy with maximum temp. of 23.0 – 25.0 °C & minimum temp. 6.0 – 10.0 °C. Relative humidity may reach upto 100 % (maximum RH) & 65 % (minimum RH). The average wind speed may be 2-3 km/ hr during next five days.

Weather Forecast for next 3 days * 0830 hours IST of 5th January, 2014

Fog would occur at many places over Manipur.

Weather Outlook for subsequent 4 days from 05th January 2015 to 09th January 2015

Rain/thundershowers would occur at a few places over northeast

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
Field Crops			
Rapeseed/ mustard	Vegetative to flowering	Aphid	- If facility is available give irrigation to keep soil moist. - 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		- If facility is available give irrigation to keep soil moist during vegetative stage for better yield.
		Aphid	- Spray Cypermethrin @2ml/lit of water or Nuvan @ 0.5ml/ 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		- Give light irrigation to attain optimum soil moisture.
		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.
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, Sweetha).
	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.



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



“Integrated Agromet Advisory Services”

Local cucumber (Kalenthabi)	Land preparation to sowing		- Land preparation for sowing of local cucumber (kalen thabi) may be 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.

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

2nd 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 3rd to 7th January, 2014 as below:

<p>Significant past weather for the preceding bi-weekly of Imphal - West (30th December, 2014 to 1st January, 2015)</p> <p>During past three days sky was partly cloudy to cloudy. No rainfall was recorded during past three days. Maximum temperature range observed was 21.2 – 22.7 °C, range of minimum temperature observed was 6.9 – 13.0 °C, mean relative humidity observed in morning and afternoon were 90.0 % and 60.7 % respectively. The average wind speed range was 0.7 – 0.9 km/hr.</p>	<p>Weather forecast for next five days of Thoubal (3rd to 7th January, 2014)</p> <p>There may be light rain at isolated places on Sunday. Sky will be mainly clear to partly cloudy with maximum temp. of 22.0 – 24.0 °C & minimum temp. 5.0 – 8.0 °C. Relative humidity may reach upto 100 % (maximum RH) & 72 % (minimum RH). The average wind speed may be 2-4 km/hr during next five days.</p>
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Weather Forecast for next 3 days * 0830 hours IST of 5th January, 2014

Fog would occur at many places over Manipur.

Weather Outlook for subsequent 4 days from 05th January 2015 to 09th January 2015

Rain/thundershowers would occur at a few places over northeast

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
Field Crops			
Rapeseed/ mustard	Vegetative to flowering	Aphid	- If facility is available give irrigation to keep soil moist. - 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		- If facility is available give irrigation to keep soil moist during vegetative stage for better yield.
		Aphid	- Spray Cypermethrin @2ml/lit of water or Nuvan @ 0.5ml/ 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		- Give light irrigation to attain optimum soil moisture.
		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.
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, Sweetha).
	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.



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“Integrated Agromet Advisory Services”

Local cucumber (Kalenhabhi)	Land preparation to sowing		- Land preparation for sowing of local cucumber (kalen habhi) may be 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.

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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“Integrated Agromet Advisory Services”

MANIPUR BULLETIN

2nd 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 3rd to 7th January, 2014 as below:

Significant past weather for the preceding bi-weekly of Imphal - West (30th December, 2014 to 1st January, 2015)

During past three days sky was partly cloudy to cloudy. No rainfall was recorded during past three days. Maximum temperature range observed was 21.2 – 22.7 °C, range of minimum temperature observed was 6.9 – 13.0 °C, mean relative humidity observed in morning and afternoon were 90.0 % and 60.7 % respectively. The average wind speed range was 0.7 – 0.9 km/hr.

Weather forecast for next five days of Ukhrul (3rd to 7th January, 2014)

There may be light rain at isolated places on Sunday. Sky will be mainly clear to partly cloudy with maximum temp. of 19.0 – 23.0 °C & minimum temp. 3.0 – 7.0 °C. Relative humidity may reach upto 99 % (maximum RH) & 64 % (minimum RH). The average wind speed may be 2-4 km/hr during next five days.

Weather Forecast for next 3 days * 0830 hours IST of 5th January, 2014

Fog would occur at many places over Manipur.

Weather Outlook for subsequent 4 days from 05th January 2015 to 09th January 2015

Rain/thundershowers would occur at a few places over northeast

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
Field Crops			
Rapeseed/ mustard	Vegetative to flowering		- If facility is available give irrigation to keep soil moist.
		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		- If facility is available give irrigation to keep soil moist during vegetative stage for better yield.
		Aphid	- Spray Cypermethrin @2ml/lit of water or Nuvan @ 0.5ml/ 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.
		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.
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, Sweetha).
	Head formation stage to harvesting	Plutella, Diamond, 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.



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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.

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



“Integrated Agromet Advisory Services”

MANIPUR BULLETIN

2nd 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 3rd to 7th January, 2014 as below:

<p>Significant past weather for the preceding bi-weekly of Imphal - West (30th December, 2014 to 1st January, 2015) During past three days sky was partly cloudy to cloudy. No rainfall was recorded during past three days. Maximum temperature range observed was 21.2 – 22.7 °C, range of minimum temperature observed was 6.9 – 13.0 °C, mean relative humidity observed in morning and afternoon were 90.0 % and 60.7 % respectively. The average wind speed range was 0.7 – 0.9 km/hr.</p>	<p>Weather forecast for next five days of Bishnupur (3rd to 7th January, 2014) There may be light rain at isolated places on Sunday. Sky will be mainly clear to partly cloudy with maximum temp. of 23.0 – 25.0 °C & minimum temp. 5.0 – 9.0 °C. Relative humidity may reach upto 100 % (maximum RH) & 71 % (minimum RH). The average wind speed may be 2-4 km/hr during next five days.</p>
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Weather Forecast for next 3 days * 0830 hours IST of 5th January, 2014

Fog would occur at many places over Manipur.

Weather Outlook for subsequent 4 days from 05th January 2015 to 09th January 2015

Rain/thundershowers would occur at a few places over northeast

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
Field Crops			
Rapeseed/ mustard	Vegetative to flowering	Aphid	- If facility is available give irrigation to keep soil moist. - 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		- If facility is available give irrigation to keep soil moist during vegetative stage for better yield.
		Aphid	- Spray Cypermethrin @2ml/lit of water or Nuvan @ 0.5ml/ 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		- Give light irrigation to attain optimum soil moisture.
		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.
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, Sweetha).
	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.



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



“Integrated Agromet Advisory Services”

Local cucumber (Kalenthabi)	Land preparation to sowing		- Land preparation for sowing of local cucumber (kalen thabi) may be 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.

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

2nd 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 3rd to 7th January, 2014 as below:

Significant past weather for the preceding bi-weekly of Imphal - West (30th December, 2014 to 1st January, 2015)

During past three days sky was partly cloudy to cloudy. No rainfall was recorded during past three days. Maximum temperature range observed was 21.2 – 22.7 °C, range of minimum temperature observed was 6.9 – 13.0 °C, mean relative humidity observed in morning and afternoon were 90.0 % and 60.7 % respectively. The average wind speed range was 0.7 – 0.9 km/hr.

Weather forecast for next five days of Chandel (3rd to 7th January, 2014)

There may be light rain at isolated places on Sunday. Sky will be mainly clear to partly cloudy with maximum temp. of 21.0 – 24.0 °C & minimum temp. 4.0 – 9.0 °C. Relative humidity may reach upto 99 % (maximum RH) & 67 % (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 5th January, 2014

Fog would occur at many places over Manipur.

Weather Outlook for subsequent 4 days from 05th January 2015 to 09th January 2015

Rain/thundershowers would occur at a few places over northeast

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
Field Crops			
Rapeseed/ mustard	Vegetative to flowering	Aphid	- If facility is available give irrigation to keep soil moist. - 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		- If facility is available give irrigation to keep soil moist during vegetative stage for better yield.
		Aphid	- Spray Cypermethrin @2ml/lit of water or Nuvan @ 0.5ml/ 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		- Give light irrigation to attain optimum soil moisture.
		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.
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, Sweetha).
	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.



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“Integrated Agromet Advisory Services”

Local cucumber (Kalenthabi)	Land preparation to sowing		- Land preparation for sowing of local cucumber (kalen thabi) may be 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.

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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