



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



“Integrated Agromet Advisory Services”

MANIPUR BULLETIN

3rd January, 2014

Bishnupur

IAAS, ICAR-RC Manipur Centre in association with India Meteorological Department, Regional Meteorological Centre, Guwahati and Northern Hemisphere Analysis Centre, New Delhi, Ministry of Earth Science, Govt. of India reports the weather forecasts for the next five days, i.e., from 4th to 8th January, 14 as given below:

<p><u>Significant past weather for the preceding bi-weekly of Imphal - West (31st December, 2013 to 2nd January, 2014)</u></p> <p>During the past three days the sky was partly cloudy during morning hours and clear during afternoon hours. No rainfall was recorded during past three days. Maximum temperature range observed was 22.7 – 23.8 °C, range of minimum temperature observed was 2.6 – 3.1 °C, mean relative humidity observed in morning and afternoon were 93 % and 44 % respectively. The average wind speed range was 0.8 – 3.1 km/hr.</p>	<p><u>Weather forecast for next five days of Bishnupur (4th to 8th January, 2014)</u></p> <p>No rain is expected upto Wednesday. Sky may be clear with maximum temp. of 20.0 - 22.0 °C & minimum temp. 1.0 – 3.0 °C. Relative Humidity may reach a maximum value of 100 % (maximum RH) & 37 % (minimum RH). The average wind speed may be 2-4 km/hr during next five days.</p>
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Last Advisory Sent:

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
Field Crops			
Rapeseed/ Mustard	Vegetative		- Irrigation may be given. Top dress with ½ N (@ 66kg Urea/ ha) just after irrigation.
		Aphid	- Spray Monocrotophos @ 1.5 ml/lit of water to the infected patches only.
Pulses (Pea & Lentil)	Vegetative		- Give light irrigation to keep soil moist during vegetative stage. - Plant to plant distance may be maintained by thinning.
		Aphid	- Spray Cypermethrin @2ml/lit of water or Nuvan @ 0.5ml/ lit of water against aphid. - For organic control against aphid, sprays that consist of azadirachtin, neem oil or pyrethrin may be used.
Rabi Maize	Sowing to vegetative		- Light irrigation may be given to keep soil moist for proper growth. - Rabi maize may be sown as intercrop with mustard or pulses. 60cm wide 40cm high ridges along east-west may be prepared after ploughing. Southern face may be sown with maize and northern with pea seeds.
Storage			- Clean and store the seeds in RC-seed bins after proper drying. Check for germination of seeds or fungal growth. Well ventilated rooms must be used for storage of grains/ seeds.
Horticulture Crops			
Local cucumber (Kalenthabi)	Land preparation to sowing		- Land preparation for sowing of local cucumber (kalen thabi) may be started.
French Bean	Land preparation		- Land preparation for sowing of French bean may be started. Select the plot where there is bright sunshine and proper drainage facility. - After ploughing, soil enrichment may be done specially in low lying area, by applying 60kg neem cake/ sangam + Trichoderma harzianum @ 5-6 kg/sangam (4-5 days before sowing).
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.
Cauliflower	Curd formation and harvesting	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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Garden pea	Vegetative		<ul style="list-style-type: none"> - Give light irrigation just to keep soil moist. - Avoid plucking of young shoots.
Tomato	Vegetative to flowering		- Proper staking should be provided to support during fruiting phase.
	Sowing		<ul style="list-style-type: none"> - Tomato nurseries should be raised under low cost polyhouse - Nursery bed of 0.75m x 4m may be prepared and mix Carbendazim @ 5g/ 3m² area, keep the bed covered with gunny bag for at least 24 hrs. - Sow seeds @ 10g/ 3m² area keep the bed covered with gunny bag.
Animal Sciences			
Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
Poultry	All susceptible age groups (as and when required)	Coccidiosis	<ul style="list-style-type: none"> - Add Supercox @ 10g in 10 litres of drinking water for 2-3 days and repeat the same after two days break. - Mix Kampro-H @ 500g in 1 ton of feed.
		Ranikhet disease	<ol style="list-style-type: none"> 1. F-1 Strain may be first administered within 7 days of age and second dose may be given at 30 days for all birds. 2. R₂B 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	<ul style="list-style-type: none"> - 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 B & vitamin A. - Protect birds from cold by hanging polythene sheet/ Hessian cloth all around the wire mesh/ poultry shed. Use electric bulb or charcoal at night time to keep rooms warm in poultry shed. - To control increase of moisture inside the poultry shed, cross-ventilation for fresh air must be provided.
Sheep/ Goat	Above 3 months of age (as and when required)	Contagious Caprine Pluero-pneumonia (CCPP)	- Vaccinate against Contagious Caprine Pluero-pneumonia intra-dermally.
		Deworming	- Administer Banif Bolus orally @ 1 bolus/ 100 kg b. wt.
		Ectoparasite	Spray Butox @ 2ml in 1 lit of water for protection against mange and mites.
			- Administer Minthal bolus @ 1 bolus/ 40kg b.wt. accompanied with Livoferol @ 20ml daily.
Pig	Above 3 months of age (as and when required)	Swine Fever & FMD	- Vaccinate against swine fever & FMD after the age of 3 months.
		Ectoparasites	- Spray Butox @ 2ml in 1 lit of water, twice a week.
			- Administer Minthal bolus @ 1 bolus/ 40 kg b.wt. accompanied with Livozyme @ 10 ml twice daily.
Cattle / Buffalo/ Mithun	Above 3 months of age (as and when required)	B.Q. & H.S.	- Vaccinate against B.Q. & H.S.
		Skin disease	- Spray Butox @ 2ml in 1 lit of water, twice a week.
			- Himax ointment may be applied on the affected area/ wounds caused due to bites of warble flies.

I. Meghachandra Singh
Scientist i/c,
Gramin Krishi Mausam Seva (GKMS)



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MANIPUR BULLETIN

3rd January, 2014

Chandel

IAAS, ICAR-RC Manipur Centre in association with India Meteorological Department, Regional Meteorological Centre, Guwahati and Northern Hemisphere Analysis Centre, New Delhi, Ministry of Earth Science, Govt. of India reports the weather forecasts for the next five days, i.e., from 4th to 8th January, 14 as given below:

<p><u>Significant past weather for the preceding bi-weekly of Imphal - West (31st December, 2013 to 2nd January, 2014)</u></p> <p>During the past three days the sky was partly cloudy during morning hours and clear during afternoon hours. No rainfall was recorded during past three days. Maximum temperature range observed was 22.7 – 23.8 °C, range of minimum temperature observed was 2.6 – 3.1 °C, mean relative humidity observed in morning and afternoon were 93 % and 44 % respectively. The average wind speed range was 0.8 – 3.1 km/hr.</p>	<p><u>Weather forecast for next five days of Chandel (4th to 8th January, 2014)</u></p> <p>No rain is expected upto Wednesday. Sky may be clear with maximum temp. of 19.0 - 21.0 °C & minimum temp. -1.0 – 2.0 °C. Relative Humidity may reach a maximum value of 98 % (maximum RH) & 39 % (minimum RH). The average wind speed may be 3-5 km/hr during next five days.</p>
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Last Advisory Sent:

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
Field Crops			
Rapeseed/ Mustard	Vegetative		- Irrigation may be given. Top dress with ½ N (@ 66kg Urea/ ha) just after irrigation.
		Aphid	- Spray Monocrotophos @ 1.5 ml/lit of water to the infected patches only.
Pulses (Pea & Lentil)	Vegetative		- Give light irrigation to keep soil moist during vegetative stage. - Plant to plant distance may be maintained by thinning.
		Aphid	- Spray Cypermethrin @2ml/lit of water or Nuvan @ 0.5ml/ lit of water against aphid. - For organic control against aphid, sprays that consist of azadirachtin, neem oil or pyrethrin may be used.
Rabi Maize	Sowing to vegetative		- Light irrigation may be given to keep soil moist for proper growth. - Rabi maize may be sown as intercrop with mustard or pulses. 60cm wide 40cm high ridges along east-west may be prepared after ploughing. Southern face may be sown with maize and northern with pea seeds.
Storage			- Clean and store the seeds in RC-seed bins after proper drying. Check for germination of seeds or fungal growth. Well ventilated rooms must be used for storage of grains/ seeds.
Horticulture Crops			
Local cucumber (Kalenthabi)	Land preparation to sowing		- Land preparation for sowing of local cucumber (kalen thabi) may be started.
French Bean	Land preparation		- Land preparation for sowing of French bean may be started. Select the plot where there is bright sunshine and proper drainage facility. - After ploughing, soil enrichment may be done specially in low lying area, by applying 60kg neem cake/ sangam + Trichoderma harzianum @ 5-6 kg/sangam (4-5 days before sowing).
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.
Cauliflower	Curd formation and harvesting	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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Garden pea	Vegetative		<ul style="list-style-type: none"> - Give light irrigation just to keep soil moist. - Avoid plucking of young shoots.
Tomato	Vegetative to flowering		- Proper staking should be provided to support during fruiting phase.
	Sowing		<ul style="list-style-type: none"> - Tomato nurseries should be raised under low cost polyhouse - Nursery bed of 0.75m x 4m may be prepared and mix Carbendazim @ 5g/ 3m² area, keep the bed covered with gunny bag for at least 24 hrs. - Sow seeds @ 10g/ 3m² area keep the bed covered with gunny bag.
Animal Sciences			
Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
Poultry	All susceptible age groups (as and when required)	Coccidiosis	<ul style="list-style-type: none"> - Add Supercox @ 10g in 10 litres of drinking water for 2-3 days and repeat the same after two days break. - Mix Kampro-H @ 500g in 1 ton of feed.
		Ranikhet disease	<ol style="list-style-type: none"> 1. F-1 Strain may be first administered within 7 days of age and second dose may be given at 30 days for all birds. 2. R₂B 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	<ul style="list-style-type: none"> - 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 B & vitamin A. - Protect birds from cold by hanging polythene sheet/ Hessian cloth all around the wire mesh/ poultry shed. Use electric bulb or charcoal at night time to keep rooms warm in poultry shed. - To control increase of moisture inside the poultry shed, cross-ventilation for fresh air must be provided.
Sheep/ Goat	Above 3 months of age (as and when required)	Contagious Caprine Pluero-pneumonia (CCPP)	- Vaccinate against Contagious Caprine Pluero-pneumonia intra-dermally.
		Deworming	- Administer Banif Bolus orally @ 1 bolus/ 100 kg b. wt.
		Ectoparasite	Spray Butox @ 2ml in 1 lit of water for protection against mange and mites.
			- Administer Minthal bolus @ 1 bolus/ 40kg b.wt. accompanied with Livoferol @ 20ml daily.
Pig	Above 3 months of age (as and when required)	Swine Fever & FMD	- Vaccinate against swine fever & FMD after the age of 3 months.
		Ectoparasites	- Spray Butox @ 2ml in 1 lit of water, twice a week.
			- Administer Minthal bolus @ 1 bolus/ 40 kg b.wt. accompanied with Livozyme @ 10 ml twice daily.
Cattle / Buffalo/ Mithun	Above 3 months of age (as and when required)	B.Q. & H.S.	- Vaccinate against B.Q. & H.S.
		Skin disease	- Spray Butox @ 2ml in 1 lit of water, twice a week.
			- Himax ointment may be applied on the affected area/ wounds caused due to bites of warble flies.

I. Meghachandra Singh
Scientist i/c,
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3rd January, 2014

Churachandpur

IAAS, ICAR-RC Manipur Centre in association with India Meteorological Department, Regional Meteorological Centre, Guwahati and Northern Hemisphere Analysis Centre, New Delhi, Ministry of Earth Science, Govt. of India reports the weather forecasts for the next five days, i.e., from 4th to 8th January, 14 as given below:

<p><u>Significant past weather for the preceding bi-weekly of Imphal - West (31st December, 2013 to 2nd January, 2014)</u></p> <p>During the past three days the sky was partly cloudy during morning hours and clear during afternoon hours. No rainfall was recorded during past three days. Maximum temperature range observed was 22.7 – 23.8 °C, range of minimum temperature observed was 2.6 – 3.1 °C, mean relative humidity observed in morning and afternoon were 93 % and 44 % respectively. The average wind speed range was 0.8 – 3.1 km/hr.</p>	<p><u>Weather forecast for next five days of Churachandpur (4th to 8th January, 2014)</u></p> <p>No rain is expected upto Wednesday. Sky may be clear with maximum temp. of 19.0 - 21.0 °C & minimum temp. -1.0 – 2.0 °C. Relative Humidity may reach a maximum value of 100 % (maximum RH) & 37 % (minimum RH). The average wind speed may be 2-4 km/hr during next five days.</p>
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Last Advisory Sent:

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
Field Crops			
Rapeseed/ Mustard	Vegetative		- Irrigation may be given. Top dress with ½ N (@ 66kg Urea/ ha) just after irrigation.
		Aphid	- Spray Monocrotophos @ 1.5 ml/lit of water to the infected patches only.
Pulses (Pea & Lentil)	Vegetative		- Give light irrigation to keep soil moist during vegetative stage. - Plant to plant distance may be maintained by thinning.
		Aphid	- Spray Cypermethrin @2ml/lit of water or Nuvan @ 0.5ml/ lit of water against aphid. - For organic control against aphid, sprays that consist of azadirachtin, neem oil or pyrethrin may be used.
Rabi Maize	Sowing to vegetative		- Light irrigation may be given to keep soil moist for proper growth. - Rabi maize may be sown as intercrop with mustard or pulses. 60cm wide 40cm high ridges along east-west may be prepared after ploughing. Southern face may be sown with maize and northern with pea seeds.
Storage			- Clean and store the seeds in RC-seed bins after proper drying. Check for germination of seeds or fungal growth. Well ventilated rooms must be used for storage of grains/ seeds.
Horticulture Crops			
Local cucumber (Kalenthabi)	Land preparation to sowing		- Land preparation for sowing of local cucumber (kalen thabi) may be started.
French Bean	Land preparation		- Land preparation for sowing of French bean may be started. Select the plot where there is bright sunshine and proper drainage facility. - After ploughing, soil enrichment may be done specially in low lying area, by applying 60kg neem cake/ sangam + Trichoderma harzianum @ 5-6 kg/sangam (4-5 days before sowing).
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.
Cauliflower	Curd formation and harvesting	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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Garden pea	Vegetative		<ul style="list-style-type: none"> - Give light irrigation just to keep soil moist. - Avoid plucking of young shoots.
Tomato	Vegetative to flowering		- Proper staking should be provided to support during fruiting phase.
	Sowing		<ul style="list-style-type: none"> - Tomato nurseries should be raised under low cost polyhouse - Nursery bed of 0.75m x 4m may be prepared and mix Carbendazim @ 5g/ 3m² area, keep the bed covered with gunny bag for at least 24 hrs. - Sow seeds @ 10g/ 3m² area keep the bed covered with gunny bag.
Animal Sciences			
Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
Poultry	All susceptible age groups (as and when required)	Coccidiosis	<ul style="list-style-type: none"> - Add Supercox @ 10g in 10 litres of drinking water for 2-3 days and repeat the same after two days break. - Mix Kampro-H @ 500g in 1 ton of feed.
		Ranikhet disease	<ol style="list-style-type: none"> 1. F-1 Strain may be first administered within 7 days of age and second dose may be given at 30 days for all birds. 2. R₂B 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	<ul style="list-style-type: none"> - 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 B & vitamin A. - Protect birds from cold by hanging polythene sheet/ Hessian cloth all around the wire mesh/ poultry shed. Use electric bulb or charcoal at night time to keep rooms warm in poultry shed. - To control increase of moisture inside the poultry shed, cross-ventilation for fresh air must be provided.
Sheep/ Goat	Above 3 months of age (as and when required)	Contagious Caprine Pluero-pneumonia (CCPP)	- Vaccinate against Contagious Caprine Pluero-pneumonia intra-dermally.
		Deworming	- Administer Banif Bolus orally @ 1 bolus/ 100 kg b. wt.
		Ectoparasite	Spray Butox @ 2ml in 1 lit of water for protection against mange and mites.
			- Administer Minthal bolus @ 1 bolus/ 40kg b.wt. accompanied with Livoferol @ 20ml daily.
Pig	Above 3 months of age (as and when required)	Swine Fever & FMD	- Vaccinate against swine fever & FMD after the age of 3 months.
		Ectoparasites	- Spray Butox @ 2ml in 1 lit of water, twice a week.
			- Administer Minthal bolus @ 1 bolus/ 40 kg b.wt. accompanied with Livozyme @ 10 ml twice daily.
Cattle / Buffalo/ Mithun	Above 3 months of age (as and when required)	B.Q. & H.S.	- Vaccinate against B.Q. & H.S.
		Skin disease	- Spray Butox @ 2ml in 1 lit of water, twice a week.
			- Himax ointment may be applied on the affected area/ wounds caused due to bites of warble flies.

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MANIPUR BULLETIN

3rd January, 2014

Imphal-East

IAAS, ICAR-RC Manipur Centre in association with India Meteorological Department, Regional Meteorological Centre, Guwahati and Northern Hemisphere Analysis Centre, New Delhi, Ministry of Earth Science, Govt. of India reports the weather forecasts for the next five days, i.e., from 4th to 8th January, 14 as given below:

Significant past weather for the preceding bi-weekly of Imphal - West (31st December, 2013 to 2nd January, 2014)

During the past three days the sky was partly cloudy during morning hours and clear during afternoon hours. **No** rainfall was recorded during past three days. Maximum temperature range observed was 22.7 – 23.8 °C, range of minimum temperature observed was 2.6 – 3.1 °C, mean relative humidity observed in morning and afternoon were 93 % and 44 % respectively. The average wind speed range was 0.8 – 3.1 km/hr.

Weather forecast for next five days of Imphal - East (4th to 8th January, 2014)

No rain is expected upto Wednesday. Sky may be clear with maximum temp. of 20.0 - 21.0 °C & minimum temp. 0.0 – 2.0 °C. Relative Humidity may reach a maximum value of 100 % (maximum RH) & 38 % (minimum RH). The average wind speed may be 2-3 km/hr during next five days.

Last Advisory Sent:

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
Field Crops			
Rapeseed/ Mustard	Vegetative		- Irrigation may be given. Top dress with ½ N (@ 66kg Urea/ ha) just after irrigation.
		Aphid	- Spray Monocrotophos @ 1.5 ml/lit of water to the infected patches only.
Pulses (Pea & Lentil)	Vegetative		- Give light irrigation to keep soil moist during vegetative stage. - Plant to plant distance may be maintained by thinning.
		Aphid	- Spray Cypermethrin @2ml/lit of water or Nuvan @ 0.5ml/ lit of water against aphid. - For organic control against aphid, sprays that consist of azadirachtin, neem oil or pyrethrin may be used.
Rabi Maize	Sowing to vegetative		- Light irrigation may be given to keep soil moist for proper growth. - Rabi maize may be sown as intercrop with mustard or pulses. 60cm wide 40cm high ridges along east-west may be prepared after ploughing. Southern face may be sown with maize and northern with pea seeds.
Storage			- Clean and store the seeds in RC-seed bins after proper drying. Check for germination of seeds or fungal growth. Well ventilated rooms must be used for storage of grains/ seeds.
Horticulture Crops			
Local cucumber (Kalenthabi)	Land preparation to sowing		- Land preparation for sowing of local cucumber (kalen thabi) may be started.
French Bean	Land preparation		- Land preparation for sowing of French bean may be started. Select the plot where there is bright sunshine and proper drainage facility. - After ploughing, soil enrichment may be done specially in low lying area, by applying 60kg neem cake/ sangam + Trichoderma harzianum @ 5-6 kg/sangam (4-5 days before sowing).
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.
Cauliflower	Curd formation and harvesting	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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Garden pea	Vegetative		<ul style="list-style-type: none"> - Give light irrigation just to keep soil moist. - Avoid plucking of young shoots.
Tomato	Vegetative to flowering		- Proper staking should be provided to support during fruiting phase.
	Sowing		<ul style="list-style-type: none"> - Tomato nurseries should be raised under low cost polyhouse - Nursery bed of 0.75m x 4m may be prepared and mix Carbendazim @ 5g/ 3m² area, keep the bed covered with gunny bag for at least 24 hrs. - Sow seeds @ 10g/ 3m² area keep the bed covered with gunny bag.
Animal Sciences			
Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
Poultry	All susceptible age groups (as and when required)	Coccidiosis	<ul style="list-style-type: none"> - Add Supercox @ 10g in 10 litres of drinking water for 2-3 days and repeat the same after two days break. - Mix Kampro-H @ 500g in 1 ton of feed.
		Ranikhet disease	<ol style="list-style-type: none"> 1. F-1 Strain may be first administered within 7 days of age and second dose may be given at 30 days for all birds. 2. R₂B 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	<ul style="list-style-type: none"> - 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 B & vitamin A. - Protect birds from cold by hanging polythene sheet/ Hessian cloth all around the wire mesh/ poultry shed. Use electric bulb or charcoal at night time to keep rooms warm in poultry shed. - To control increase of moisture inside the poultry shed, cross-ventilation for fresh air must be provided.
Sheep/ Goat	Above 3 months of age (as and when required)	Contagious Caprine Pluero-pneumonia (CCPP)	- Vaccinate against Contagious Caprine Pluero-pneumonia intra-dermally.
		Deworming	- Administer Banif Bolus orally @ 1 bolus/ 100 kg b. wt.
		Ectoparasite	Spray Butox @ 2ml in 1 lit of water for protection against mange and mites.
			- Administer Minthal bolus @ 1 bolus/ 40kg b.wt. accompanied with Livoferol @ 20ml daily.
Pig	Above 3 months of age (as and when required)	Swine Fever & FMD	- Vaccinate against swine fever & FMD after the age of 3 months.
		Ectoparasites	- Spray Butox @ 2ml in 1 lit of water, twice a week.
			- Administer Minthal bolus @ 1 bolus/ 40 kg b.wt. accompanied with Livozyme @ 10 ml twice daily.
Cattle / Buffalo/ Mithun	Above 3 months of age (as and when required)	B.Q. & H.S.	- Vaccinate against B.Q. & H.S.
		Skin disease	- Spray Butox @ 2ml in 1 lit of water, twice a week.
			- Himax ointment may be applied on the affected area/ wounds caused due to bites of warble flies.

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3rd January, 2014

Imphal-West

IAAS, ICAR-RC Manipur Centre in association with India Meteorological Department, Regional Meteorological Centre, Guwahati and Northern Hemisphere Analysis Centre, New Delhi, Ministry of Earth Science, Govt. of India reports the weather forecasts for the next five days, i.e., from 4th to 8th January, 14 as given below:

<p><u>Significant past weather for the preceding bi-weekly of Imphal - West (31st December, 2013 to 2nd January, 2014)</u></p> <p>During the past three days the sky was partly cloudy during morning hours and clear during afternoon hours. No rainfall was recorded during past three days. Maximum temperature range observed was 22.7 – 23.8 °C, range of minimum temperature observed was 2.6 – 3.1 °C, mean relative humidity observed in morning and afternoon were 93 % and 44 % respectively. The average wind speed range was 0.8 – 3.1 km/hr.</p>	<p><u>Weather forecast for next five days of Imphal - West (4th to 8th January, 2014)</u></p> <p>No rain is expected upto Wednesday. Sky may be clear with maximum temp. of 20.0 - 22.0 °C & minimum temp. -1.0 – 2.0 °C. Relative Humidity may reach a maximum value of 100 % (maximum RH) & 38 % (minimum RH). The average wind speed may be 2-4 km/hr during next five days.</p>
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Last Advisory Sent:

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
Field Crops			
Rapeseed/ Mustard	Vegetative		- Irrigation may be given. Top dress with ½ N (@ 66kg Urea/ ha) just after irrigation.
		Aphid	- Spray Monocrotophos @ 1.5 ml/lit of water to the infected patches only.
Pulses (Pea & Lentil)	Vegetative		- Give light irrigation to keep soil moist during vegetative stage. - Plant to plant distance may be maintained by thinning.
		Aphid	- Spray Cypermethrin @2ml/lit of water or Nuvan @ 0.5ml/ lit of water against aphid. - For organic control against aphid, sprays that consist of azadirachtin, neem oil or pyrethrin may be used.
Rabi Maize	Sowing to vegetative		- Light irrigation may be given to keep soil moist for proper growth. - Rabi maize may be sown as intercrop with mustard or pulses. 60cm wide 40cm high ridges along east-west may be prepared after ploughing. Southern face may be sown with maize and northern with pea seeds.
Storage			- Clean and store the seeds in RC-seed bins after proper drying. Check for germination of seeds or fungal growth. Well ventilated rooms must be used for storage of grains/ seeds.
Horticulture Crops			
Local cucumber (Kalenthabi)	Land preparation to sowing		- Land preparation for sowing of local cucumber (kalen thabi) may be started.
French Bean	Land preparation		- Land preparation for sowing of French bean may be started. Select the plot where there is bright sunshine and proper drainage facility. - After ploughing, soil enrichment may be done specially in low lying area, by applying 60kg neem cake/ sangam + Trichoderma harzianum @ 5-6 kg/sangam (4-5 days before sowing).
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.
Cauliflower	Curd formation and harvesting	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”

Garden pea	Vegetative		<ul style="list-style-type: none"> - Give light irrigation just to keep soil moist. - Avoid plucking of young shoots.
Tomato	Vegetative to flowering		- Proper staking should be provided to support during fruiting phase.
	Sowing		<ul style="list-style-type: none"> - Tomato nurseries should be raised under low cost polyhouse - Nursery bed of 0.75m x 4m may be prepared and mix Carbendazim @ 5g/ 3m² area, keep the bed covered with gunny bag for at least 24 hrs. - Sow seeds @ 10g/ 3m² area keep the bed covered with gunny bag.
Animal Sciences			
Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
Poultry	All susceptible age groups (as and when required)	Coccidiosis	<ul style="list-style-type: none"> - Add Supercox @ 10g in 10 litres of drinking water for 2-3 days and repeat the same after two days break. - Mix Kampro-H @ 500g in 1 ton of feed.
		Ranikhet disease	<ol style="list-style-type: none"> 1. F-1 Strain may be first administered within 7 days of age and second dose may be given at 30 days for all birds. 2. R₂B 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	<ul style="list-style-type: none"> - 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 B & vitamin A. - Protect birds from cold by hanging polythene sheet/ Hessian cloth all around the wire mesh/ poultry shed. Use electric bulb or charcoal at night time to keep rooms warm in poultry shed. - To control increase of moisture inside the poultry shed, cross-ventilation for fresh air must be provided.
Sheep/ Goat	Above 3 months of age (as and when required)	Contagious Caprine Pluero-pneumonia (CCPP)	- Vaccinate against Contagious Caprine Pluero-pneumonia intra-dermally.
		Deworming	- Administer Banif Bolus orally @ 1 bolus/ 100 kg b. wt.
		Ectoparasite	Spray Butox @ 2ml in 1 lit of water for protection against mange and mites.
			- Administer Minthal bolus @ 1 bolus/ 40kg b.wt. accompanied with Livoferol @ 20ml daily.
Pig	Above 3 months of age (as and when required)	Swine Fever & FMD	- Vaccinate against swine fever & FMD after the age of 3 months.
		Ectoparasites	- Spray Butox @ 2ml in 1 lit of water, twice a week.
			- Administer Minthal bolus @ 1 bolus/ 40 kg b.wt. accompanied with Livozyme @ 10 ml twice daily.
Cattle / Buffalo/ Mithun	Above 3 months of age (as and when required)	B.Q. & H.S.	- Vaccinate against B.Q. & H.S.
		Skin disease	- Spray Butox @ 2ml in 1 lit of water, twice a week.
			- Himax ointment may be applied on the affected area/ wounds caused due to bites of warble flies.

I. Meghachandra Singh
Scientist i/c,
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**ICAR Research Complex for N.E.H. Region
Manipur Centre, Lamphelpat, Imphal - 795 004**



“Integrated Agromet Advisory Services”

MANIPUR BULLETIN

3rd January, 2014

Senapati

IAAS, ICAR-RC Manipur Centre in association with India Meteorological Department, Regional Meteorological Centre, Guwahati and Northern Hemisphere Analysis Centre, New Delhi, Ministry of Earth Science, Govt. of India reports the weather forecasts for the next five days, i.e., from 4th to 8th January, 14 as given below:

Significant past weather for the preceding bi-weekly of Imphal - West (31st December, 2013 to 2nd January, 2014)

During the past three days the sky was partly cloudy during morning hours and clear during afternoon hours. **No** rainfall was recorded during past three days. Maximum temperature range observed was 22.7 – 23.8 °C, range of minimum temperature observed was 2.6 – 3.1 °C, mean relative humidity observed in morning and afternoon were 93 % and 44 % respectively. The average wind speed range was 0.8 – 3.1 km/hr.

Weather forecast for next five days of Senapati (4th to 8th January, 2014)

No rain is expected upto Wednesday. Sky may be clear with maximum temp. of 18.0 - 20.0 °C & minimum temp. -1.0 – 1.0 °C. Relative Humidity may reach a maximum value of 99 % (maximum RH) & 38 % (minimum RH). The average wind speed may be 2-4 km/hr during next five days.

Last Advisory Sent:

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
Field Crops			
Rapeseed/ Mustard	Vegetative		- Irrigation may be given. Top dress with ½ N (@ 66kg Urea/ ha) just after irrigation.
		Aphid	- Spray Monocrotophos @ 1.5 ml/lit of water to the infected patches only.
Pulses (Pea & Lentil)	Vegetative		- Give light irrigation to keep soil moist during vegetative stage. - Plant to plant distance may be maintained by thinning.
		Aphid	- Spray Cypermethrin @2ml/lit of water or Nuvan @ 0.5ml/ lit of water against aphid. - For organic control against aphid, sprays that consist of azadirachtin, neem oil or pyrethrin may be used.
Rabi Maize	Sowing to vegetative		- Light irrigation may be given to keep soil moist for proper growth. - Rabi maize may be sown as intercrop with mustard or pulses. 60cm wide 40cm high ridges along east-west may be prepared after ploughing. Southern face may be sown with maize and northern with pea seeds.
Storage			- Clean and store the seeds in RC-seed bins after proper drying. Check for germination of seeds or fungal growth. Well ventilated rooms must be used for storage of grains/ seeds.
Horticulture Crops			
Local cucumber (Kalenthabi)	Land preparation to sowing		- Land preparation for sowing of local cucumber (kalen thabi) may be started.
French Bean	Land preparation		- Land preparation for sowing of French bean may be started. Select the plot where there is bright sunshine and proper drainage facility. - After ploughing, soil enrichment may be done specially in low lying area, by applying 60kg neem cake/ sangam + Trichoderma harzianum @ 5-6 kg/sangam (4-5 days before sowing).
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.
Cauliflower	Curd formation and harvesting	Whip tail and Chlorosis	- Spray Tracerl @ 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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Manipur Centre, Lamphelpat, Imphal - 795 004**



“Integrated Agromet Advisory Services”

Garden pea	Vegetative		<ul style="list-style-type: none"> - Give light irrigation just to keep soil moist. - Avoid plucking of young shoots.
Tomato	Vegetative to flowering		- Proper staking should be provided to support during fruiting phase.
	Sowing		<ul style="list-style-type: none"> - Tomato nurseries should be raised under low cost polyhouse - Nursery bed of 0.75m x 4m may be prepared and mix Carbendazim @ 5g/ 3m² area, keep the bed covered with gunny bag for at least 24 hrs. - Sow seeds @ 10g/ 3m² area keep the bed covered with gunny bag.
Animal Sciences			
Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
Poultry	All susceptible age groups (as and when required)	Coccidiosis	<ul style="list-style-type: none"> - Add Supercox @ 10g in 10 litres of drinking water for 2-3 days and repeat the same after two days break. - Mix Kampro-H @ 500g in 1 ton of feed.
		Ranikhet disease	<ol style="list-style-type: none"> 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. R₂B 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	<ul style="list-style-type: none"> - 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 B & vitamin A. - Protect birds from cold by hanging polythene sheet/ Hessian cloth all around the wire mesh/ poultry shed. Use electric bulb or charcoal at night time to keep rooms warm in poultry shed. - To control increase of moisture inside the poultry shed, cross-ventilation for fresh air must be provided.
Sheep/ Goat	Above 3 months of age (as and when required)	Contagious Caprine Pluero-pneumonia (CCPP)	- Vaccinate against Contagious Caprine Pluero-pneumonia intra-dermally.
		Deworming	- Administer Banif Bolus orally @ 1 bolus/ 100 kg b. wt.
		Ectoparasite	Spray Butox @ 2ml in 1 lit of water for protection against mange and mites.
			- Administer Minthal bolus @ 1 bolus/ 40kg b.wt. accompanied with Livoferol @ 20ml daily.
Pig	Above 3 months of age (as and when required)	Swine Fever & FMD	- Vaccinate against swine fever & FMD after the age of 3 months.
		Ectoparasites	- Spray Butox @ 2ml in 1 lit of water, twice a week.
			- Administer Minthal bolus @ 1 bolus/ 40 kg b.wt. accompanied with Livozyme @ 10 ml twice daily.
Cattle / Buffalo/ Mithun	Above 3 months of age (as and when required)	B.Q. & H.S.	- Vaccinate against B.Q. & H.S.
		Skin disease	- Spray Butox @ 2ml in 1 lit of water, twice a week.
			- Himax ointment may be applied on the affected area/ wounds caused due to bites of warble flies.

I. Meghachandra Singh
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“Integrated Agromet Advisory Services”

MANIPUR BULLETIN

3rd January, 2014

Tamenglong

IAAS, ICAR-RC Manipur Centre in association with India Meteorological Department, Regional Meteorological Centre, Guwahati and Northern Hemisphere Analysis Centre, New Delhi, Ministry of Earth Science, Govt. of India reports the weather forecasts for the next five days, i.e., from 4th to 8th January, 14 as given below:

<p><u>Significant past weather for the preceding bi-weekly of Imphal - West (31st December, 2013 to 2nd January, 2014)</u></p> <p>During the past three days the sky was partly cloudy during morning hours and clear during afternoon hours. No rainfall was recorded during past three days. Maximum temperature range observed was 22.7 – 23.8 °C, range of minimum temperature observed was 2.6 – 3.1 °C, mean relative humidity observed in morning and afternoon were 93 % and 44 % respectively. The average wind speed range was 0.8 – 3.1 km/hr.</p>	<p><u>Weather forecast for next five days of Tamenglong (4th to 8th January, 2014)</u></p> <p>No rain is expected upto Wednesday. Sky may be clear with maximum temp. of 20.0 - 23.0 °C & minimum temp. 0.0 – 2.0 °C. Relative Humidity may reach a maximum value of 100 % (maximum RH) & 37 % (minimum RH). The average wind speed may be 2-4 km/hr during next five days.</p>
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Last Advisory Sent:

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
Field Crops			
Rapeseed/ Mustard	Vegetative		- Irrigation may be given. Top dress with ½ N (@ 66kg Urea/ ha) just after irrigation.
		Aphid	- Spray Monocrotophos @ 1.5 ml/lit of water to the infected patches only.
Pulses (Pea & Lentil)	Vegetative		- Give light irrigation to keep soil moist during vegetative stage. - Plant to plant distance may be maintained by thinning.
		Aphid	- Spray Cypermethrin @2ml/lit of water or Nuvan @ 0.5ml/ lit of water against aphid. - For organic control against aphid, sprays that consist of azadirachtin, neem oil or pyrethrin may be used.
Rabi Maize	Sowing to vegetative		- Light irrigation may be given to keep soil moist for proper growth. - Rabi maize may be sown as intercrop with mustard or pulses. 60cm wide 40cm high ridges along east-west may be prepared after ploughing. Southern face may be sown with maize and northern with pea seeds.
Storage			- Clean and store the seeds in RC-seed bins after proper drying. Check for germination of seeds or fungal growth. Well ventilated rooms must be used for storage of grains/ seeds.
Horticulture Crops			
Local cucumber (Kalenthabi)	Land preparation to sowing		- Land preparation for sowing of local cucumber (kalen thabi) may be started.
French Bean	Land preparation		- Land preparation for sowing of French bean may be started. Select the plot where there is bright sunshine and proper drainage facility. - After ploughing, soil enrichment may be done specially in low lying area, by applying 60kg neem cake/ sangam + Trichoderma harzianum @ 5-6 kg/sangam (4-5 days before sowing).
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.
Cauliflower	Curd formation and harvesting	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”

Garden pea	Vegetative		<ul style="list-style-type: none"> - Give light irrigation just to keep soil moist. - Avoid plucking of young shoots.
Tomato	Vegetative to flowering		- Proper staking should be provided to support during fruiting phase.
	Sowing		<ul style="list-style-type: none"> - Tomato nurseries should be raised under low cost polyhouse - Nursery bed of 0.75m x 4m may be prepared and mix Carbendazim @ 5g/ 3m² area, keep the bed covered with gunny bag for at least 24 hrs. - Sow seeds @ 10g/ 3m² area keep the bed covered with gunny bag.
Animal Sciences			
Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
Poultry	All susceptible age groups (as and when required)	Coccidiosis	<ul style="list-style-type: none"> - Add Supercox @ 10g in 10 litres of drinking water for 2-3 days and repeat the same after two days break. - Mix Kampro-H @ 500g in 1 ton of feed.
		Ranikhet disease	<ol style="list-style-type: none"> 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. R₂B 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	<ul style="list-style-type: none"> - 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 B & vitamin A. - Protect birds from cold by hanging polythene sheet/ Hessian cloth all around the wire mesh/ poultry shed. Use electric bulb or charcoal at night time to keep rooms warm in poultry shed. - To control increase of moisture inside the poultry shed, cross-ventilation for fresh air must be provided.
Sheep/ Goat	Above 3 months of age (as and when required)	Contagious Caprine Pluero-pneumonia (CCPP)	- Vaccinate against Contagious Caprine Pluero-pneumonia intra-dermally.
		Deworming	- Administer Banif Bolus orally @ 1 bolus/ 100 kg b. wt.
		Ectoparasite	Spray Butox @ 2ml in 1 lit of water for protection against mange and mites.
			- Administer Minthal bolus @ 1 bolus/ 40kg b.wt. accompanied with Livoferol @ 20ml daily.
Pig	Above 3 months of age (as and when required)	Swine Fever & FMD	- Vaccinate against swine fever & FMD after the age of 3 months.
		Ectoparasites	- Spray Butox @ 2ml in 1 lit of water, twice a week.
			- Administer Minthal bolus @ 1 bolus/ 40 kg b.wt. accompanied with Livozyme @ 10 ml twice daily.
Cattle / Buffalo/ Mithun	Above 3 months of age (as and when required)	B.Q. & H.S.	- Vaccinate against B.Q. & H.S.
		Skin disease	- Spray Butox @ 2ml in 1 lit of water, twice a week.
			- Himax ointment may be applied on the affected area/ wounds caused due to bites of warble flies.

I. Meghachandra Singh
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“Integrated Agromet Advisory Services”

MANIPUR BULLETIN

3rd January, 2014

Thoubal

IAAS, ICAR-RC Manipur Centre in association with India Meteorological Department, Regional Meteorological Centre, Guwahati and Northern Hemisphere Analysis Centre, New Delhi, Ministry of Earth Science, Govt. of India reports the weather forecasts for the next five days, i.e., from 4th to 8th January, 14 as given below:

Significant past weather for the preceding bi-weekly of Imphal - West (31st December, 2013 to 2nd January, 2014)

During the past three days the sky was partly cloudy during morning hours and clear during afternoon hours. **No** rainfall was recorded during past three days. Maximum temperature range observed was 22.7 – 23.8 °C, range of minimum temperature observed was 2.6 – 3.1 °C, mean relative humidity observed in morning and afternoon were 93 % and 44 % respectively. The average wind speed range was 0.8 – 3.1 km/hr.

Weather forecast for next five days of Thoubal (4th to 8th January, 2014)

No rain is expected upto Wednesday. Sky may be clear with maximum temp. of 20.0 - 21.0 °C & minimum temp. 0.0 – 2.0 °C. Relative Humidity may reach a maximum value of 100 % (maximum RH) & 37 % (minimum RH). The average wind speed may be 2-4 km/hr during next five days.

Last Advisory Sent:

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
Field Crops			
Rapeseed/ Mustard	Vegetative		- Irrigation may be given. Top dress with ½ N (@ 66kg Urea/ ha) just after irrigation.
		Aphid	- Spray Monocrotophos @ 1.5 ml/lit of water to the infected patches only.
Pulses (Pea & Lentil)	Vegetative		- Give light irrigation to keep soil moist during vegetative stage. - Plant to plant distance may be maintained by thinning.
		Aphid	- Spray Cypermethrin @2ml/lit of water or Nuvan @ 0.5ml/ lit of water against aphid. - For organic control against aphid, sprays that consist of azadirachtin, neem oil or pyrethrin may be used.
Rabi Maize	Sowing to vegetative		- Light irrigation may be given to keep soil moist for proper growth. - Rabi maize may be sown as intercrop with mustard or pulses. 60cm wide 40cm high ridges along east-west may be prepared after ploughing. Southern face may be sown with maize and northern with pea seeds.
Storage			- Clean and store the seeds in RC-seed bins after proper drying. Check for germination of seeds or fungal growth. Well ventilated rooms must be used for storage of grains/ seeds.
Horticulture Crops			
Local cucumber (Kalenthabi)	Land preparation to sowing		- Land preparation for sowing of local cucumber (kalen thabi) may be started.
French Bean	Land preparation		- Land preparation for sowing of French bean may be started. Select the plot where there is bright sunshine and proper drainage facility. - After ploughing, soil enrichment may be done specially in low lying area, by applying 60kg neem cake/ sangam + Trichoderma harzianum @ 5-6 kg/sangam (4-5 days before sowing).
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.
Cauliflower	Curd formation and harvesting	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”

Garden pea	Vegetative		<ul style="list-style-type: none"> - Give light irrigation just to keep soil moist. - Avoid plucking of young shoots.
Tomato	Vegetative to flowering		- Proper staking should be provided to support during fruiting phase.
	Sowing		<ul style="list-style-type: none"> - Tomato nurseries should be raised under low cost polyhouse - Nursery bed of 0.75m x 4m may be prepared and mix Carbendazim @ 5g/ 3m² area, keep the bed covered with gunny bag for at least 24 hrs. - Sow seeds @ 10g/ 3m² area keep the bed covered with gunny bag.
Animal Sciences			
Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
Poultry	All susceptible age groups (as and when required)	Coccidiosis	<ul style="list-style-type: none"> - Add Supercox @ 10g in 10 litres of drinking water for 2-3 days and repeat the same after two days break. - Mix Kampro-H @ 500g in 1 ton of feed.
		Ranikhet disease	<ol style="list-style-type: none"> 1. F-1 Strain may be first administered within 7 days of age and second dose may be given at 30 days for all birds. 2. R₂B 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	<ul style="list-style-type: none"> - 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 B & vitamin A. - Protect birds from cold by hanging polythene sheet/ Hessian cloth all around the wire mesh/ poultry shed. Use electric bulb or charcoal at night time to keep rooms warm in poultry shed. - To control increase of moisture inside the poultry shed, cross-ventilation for fresh air must be provided.
Sheep/ Goat	Above 3 months of age (as and when required)	Contagious Caprine Pluero-pneumonia (CCPP)	- Vaccinate against Contagious Caprine Pluero-pneumonia intra-dermally.
		Deworming	- Administer Banif Bolus orally @ 1 bolus/ 100 kg b. wt.
		Ectoparasite	Spray Butox @ 2ml in 1 lit of water for protection against mange and mites.
			- Administer Minthal bolus @ 1 bolus/ 40kg b.wt. accompanied with Livoferol @ 20ml daily.
Pig	Above 3 months of age (as and when required)	Swine Fever & FMD	- Vaccinate against swine fever & FMD after the age of 3 months.
		Ectoparasites	- Spray Butox @ 2ml in 1 lit of water, twice a week.
			- Administer Minthal bolus @ 1 bolus/ 40 kg b.wt. accompanied with Livozyme @ 10 ml twice daily.
Cattle / Buffalo/ Mithun	Above 3 months of age (as and when required)	B.Q. & H.S.	- Vaccinate against B.Q. & H.S.
		Skin disease	- Spray Butox @ 2ml in 1 lit of water, twice a week.
			- Himax ointment may be applied on the affected area/ wounds caused due to bites of warble flies.

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



“Integrated Agromet Advisory Services”

MANIPUR BULLETIN

3rd January, 2014

Ukhrul

IAAS, ICAR-RC Manipur Centre in association with India Meteorological Department, Regional Meteorological Centre, Guwahati and Northern Hemisphere Analysis Centre, New Delhi, Ministry of Earth Science, Govt. of India reports the weather forecasts for the next five days, i.e., from 4th to 8th January, 14 as given below:

Significant past weather for the preceding bi-weekly of Imphal - West (31st December, 2013 to 2nd January, 2014)

During the past three days the sky was partly cloudy during morning hours and clear during afternoon hours. **No** rainfall was recorded during past three days. Maximum temperature range observed was 22.7 – 23.8 °C, range of minimum temperature observed was 2.6 – 3.1 °C, mean relative humidity observed in morning and afternoon were 93 % and 44 % respectively. The average wind speed range was 0.8 – 3.1 km/hr.

Weather forecast for next five days of Ukhrul (4th to 8th January, 2014)

No rain is expected upto Wednesday. Sky may be clear with maximum temp. of 18.0 - 19.0 °C & minimum temp. 0.0 – 1.0 °C. Relative Humidity may reach a maximum value of 98 % (maximum RH) & 38 % (minimum RH). The average wind speed may be 3-4 km/hr during next five days.

Last Advisory Sent:

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
Field Crops			
Rapeseed/ Mustard	Vegetative		- Irrigation may be given. Top dress with ½ N (@ 66kg Urea/ ha) just after irrigation.
		Aphid	- Spray Monocrotophos @ 1.5 ml/lit of water to the infected patches only.
Pulses (Pea & Lentil)	Vegetative		- Give light irrigation to keep soil moist during vegetative stage. - Plant to plant distance may be maintained by thinning.
		Aphid	- Spray Cypermethrin @2ml/lit of water or Nuvan @ 0.5ml/ lit of water against aphid. - For organic control against aphid, sprays that consist of azadirachtin, neem oil or pyrethrin may be used.
Rabi Maize	Sowing to vegetative		- Light irrigation may be given to keep soil moist for proper growth. - Rabi maize may be sown as intercrop with mustard or pulses. 60cm wide 40cm high ridges along east-west may be prepared after ploughing. Southern face may be sown with maize and northern with pea seeds.
Storage			- Clean and store the seeds in RC-seed bins after proper drying. Check for germination of seeds or fungal growth. Well ventilated rooms must be used for storage of grains/ seeds.
Horticulture Crops			
Local cucumber (Kalenthabi)	Land preparation to sowing		- Land preparation for sowing of local cucumber (kalen thabi) may be started.
French Bean	Land preparation		- Land preparation for sowing of French bean may be started. Select the plot where there is bright sunshine and proper drainage facility. - After ploughing, soil enrichment may be done specially in low lying area, by applying 60kg neem cake/ sangam + Trichoderma harzianum @ 5-6 kg/sangam (4-5 days before sowing).
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.
Cauliflower	Curd formation and harvesting	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”

Garden pea	Vegetative		<ul style="list-style-type: none"> - Give light irrigation just to keep soil moist. - Avoid plucking of young shoots.
Tomato	Vegetative to flowering		- Proper staking should be provided to support during fruiting phase.
	Sowing		<ul style="list-style-type: none"> - Tomato nurseries should be raised under low cost polyhouse - Nursery bed of 0.75m x 4m may be prepared and mix Carbendazim @ 5g/ 3m² area, keep the bed covered with gunny bag for at least 24 hrs. - Sow seeds @ 10g/ 3m² area keep the bed covered with gunny bag.
Animal Sciences			
Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
Poultry	All susceptible age groups (as and when required)	Coccidiosis	<ul style="list-style-type: none"> - Add Supercox @ 10g in 10 litres of drinking water for 2-3 days and repeat the same after two days break. - Mix Kampro-H @ 500g in 1 ton of feed.
		Ranikhet disease	<ol style="list-style-type: none"> 1. F-1 Strain may be first administered within 7 days of age and second dose may be given at 30 days for all birds. 2. R₂B 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	<ul style="list-style-type: none"> - 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 B & vitamin A. - Protect birds from cold by hanging polythene sheet/ Hessian cloth all around the wire mesh/ poultry shed. Use electric bulb or charcoal at night time to keep rooms warm in poultry shed. - To control increase of moisture inside the poultry shed, cross-ventilation for fresh air must be provided.
Sheep/ Goat	Above 3 months of age (as and when required)	Contagious Caprine Pluero-pneumonia (CCPP)	- Vaccinate against Contagious Caprine Pluero-pneumonia intra-dermally.
		Deworming	- Administer Banif Bolus orally @ 1 bolus/ 100 kg b. wt.
		Ectoparasite	Spray Butox @ 2ml in 1 lit of water for protection against mange and mites.
			- Administer Minthal bolus @ 1 bolus/ 40kg b.wt. accompanied with Livoferol @ 20ml daily.
Pig	Above 3 months of age (as and when required)	Swine Fever & FMD	- Vaccinate against swine fever & FMD after the age of 3 months.
		Ectoparasites	- Spray Butox @ 2ml in 1 lit of water, twice a week.
			- Administer Minthal bolus @ 1 bolus/ 40 kg b.wt. accompanied with Livozyme @ 10 ml twice daily.
Cattle / Buffalo/ Mithun	Above 3 months of age (as and when required)	B.Q. & H.S.	- Vaccinate against B.Q. & H.S.
		Skin disease	- Spray Butox @ 2ml in 1 lit of water, twice a week.
			- Himax ointment may be applied on the affected area/ wounds caused due to bites of warble flies.

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