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EXPERIMENTAL AGROMET ADVISORY SERVICE
ICAR Research Complex for NEH Region
Manipur Centre, Lamphelpat
Imphal - 795 004

Station: Lamphelpat, Imphal
Latitude: 24° 45' N

Month & Year: January, 2013
Longitude: 93° 54' E

Date	Temperature (°C)		Relative Humidity (%)		Wind Direction		Wind Speed
	Max.	Min.	07 00 hrs	13 00hrs	07 00 hrs	13 00hrs	km/hr
01-04-13	22.8	2.5	89	40	320	250	2.7
01-05-13	23.4	2.5	94	49	290	230	1.5
01-06-13	23.4	1.4	78	43	315	225	2.2
01-07-13	18.0	1.5	86	28	280	300	2.5

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Station: Lamphelpat, Imphal
Latitude: 24° 45' N

Month & Year: January, 2013
Longitude: 93° 54' E

Date	Temperature (°C)		Relative Humidity (%)		Wind Direction		Wind Speed
	Max.	Min.	07 00 hrs	13 00hrs	07 00 hrs	13 00hrs	km/hr
01-15-13	22.6	2.0	86	36	290	225	0.8
01-16-13	23.0	2.4	71	39	170	205	0.8
01-17-13	23.8	3.2	83	42	35	175	0.4

Standard Week: 1 & 2

Altitude : 774m

Cloud Cover (Okta)		Rainfall (mm)
07 00 hrs	13 00hrs	
3	1	0.0
4	0	0.0
2	0	0.0
2	7	0.0

- - -

Standard Week: 3

Altitude : 774m

Cloud Cover (Okta)		Rainfall (mm)
07 00 hrs	13 00hrs	
2	0	0.0
2	0	0.0
2	2	0.0



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



“Integrated Agromet Advisory Services”

MANIPUR BULLETIN
8th January, 2013

Bishnupur

IAAS, ICAR-RC Manipur Centre in association with India Meteorological Department, Regional Meteorological Centre, Guwahati and Northern Hemisphere Analysis Centre, New Delhi, Ministry of Earth Science, Govt. of India reports the weather forecasts for the next five days, i.e., from 9th to 13th January, 2013 as given below:

<u>Significant past weather for the preceding bi-weekly of Imphal - West (4th to 7th January, 2013)</u>	<u>Weather forecast for next five days of Bishnupur (9th to 13th January, 2013)</u>
<p>During the past four days the sky was mainly clear to partly cloudy but mainly cloudy during morning hours of 2nd Jan. No rainfall was recorded during past four days. Maximum temperature range observed was 18.0 – 23.4 °C, range of minimum temperature observed was 1.4 – 2.5 °C, mean relative humidity observed in morning and afternoon were 86.75 % and 40.0 % respectively. The average wind speed range was 1.5 – 2.5 km/hr.</p>	<p>There is likely of no rain during next five days. The sky is likely to clear to mainly clear. The maximum temp. is likely to be 17.0 - 22.0 °C. The minimum temp. is likely to be 2.0 - 5.0 °C. The maximum RH is likely to attain a max value of 81 %. Minimum RH is likely to reach a max of 61 %. The average wind speed during next five days may reach upto max. value of 4 km/hr.</p>

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
Field Crops			
Zero tillage Rapeseed	Vegetative		<ul style="list-style-type: none"> - Top dress and irrigate. - Thinning must be done where plant population is high.
Rabi Maize	Vegetative		<ul style="list-style-type: none"> - Irrigation may be done. - After earthing up, top dress with nitrogen fertilizer when the plant is knee high.
Storage			<ul style="list-style-type: none"> - Seeds of crops like rice, soybean, groundnut, etc. must be stored in RC-seed bins after proper drying. Check for germination of seeds. Clean and dry the seeds.
Horticulture Crops			
<ul style="list-style-type: none"> - As the weather is foggy during morning and evening, smoking (using straw/ husk of rice) may be done in and around those crop field in which the crop is in vegetative stage, specially for solanaceae crop. Irrigation may be done to keep soil moist. 			
Papaya	Nursery		<ul style="list-style-type: none"> Sowing may be done. Recommended varieties are- Coorg Honey, Ranchi Dwarf and Amit Sagar.
Citrus (Orange, Lemon, Lime)	Seed collection & nursery		<ul style="list-style-type: none"> - Collect healthy & mature fruits from disease free tree and raise nursery. - In grown-up trees, remove water sprouts, dried leaves and dead branches and paint the cut ends with Bordeaux paste.
Cucurbits	Nursery		<ul style="list-style-type: none"> Nurseries of gourd, sponge gourd, bitter gourd, pumpkin, etc. may be raised in polybags (2x3 inches) or pro-trays under polyhouse.
Dolichos bean	Fruiting	Aphid	<ul style="list-style-type: none"> - Watering to wash off the aphid is required as the crop is in fruiting stage.
Onion/ Garlic	Vegetative		<ul style="list-style-type: none"> - Light and frequent watering is required.
Potato	Vegetative		<ul style="list-style-type: none"> - For crop in vegetative stage (40-45 days) with 4-6 leaves stage, top dress with 25 kg DAP/ sangam followed earthing-up of ridges and light irrigation to keep the soil moist.
Pea	Vegetative to flowering		<ul style="list-style-type: none"> - Avoid nipping of young shoots at vegetative stage as it will delay fruiting and reduce the yield. Spray Bayleton @ 0.7g/ 10 lit of water if incidence of powdery mildew is observed.
Cole crops	Nursery and transplanting to vegetative Harvesting of broccoli		<ul style="list-style-type: none"> - Light and frequent watering is required. - Harvesting of Broccoli must be done when the head/ bud are compact, before it gets open. Maintain stalk length of 10-15 cm while harvesting.



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



“Integrated Agromet Advisory Services”

Fisheries

Type of Farming	Agro-meteorological advisories
Carp culture	<ul style="list-style-type: none"> Renew half of the culture pond water with clean and fresh water regularly Depth of pond water should be maintained at 1.0 – 1.5 m. If there is problem in maintaining water level of large area then thinning of fish population may be done and culture pond area may be reduced. Also, maintain stock density @ 5000 fishes/ ha. Feed should be given @ 2 % of body weight per day. As a disinfectant, regularly apply CIFAX/ lime in culture pond in small quantity at an interval of 15-20 days.

Animal Sciences

* Use Butox @ 2 ml/lit of water and brush the animal / spray the solution once/ twice in a week against external parasites (Mites) in cattle/ buffalo/ Mithun, goat/ sheep and (Mange) in pig.

Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
Pig	Above 3 months of age	Internal parasite Swine Fever	<ul style="list-style-type: none"> - De-worm using Panacur @ 1 tab/10 kg body weight orally once only and repeat after one month. - Vaccinate against Swine Fever (animals of above 3 months of age).
	All susceptible age groups	Coccidiosis	<ul style="list-style-type: none"> - Advocate Metaprim @ 2g/ 10 kg body weight for 5-7 days, include electrolyte powder.
Cattle / Buffalo/ Mithun	All age groups except three months or below	FMD	<ul style="list-style-type: none"> - FMD vaccination maybe done at the first age of 4 months. It must be repeated after 6 months then annually.
		Internal parasite	<ul style="list-style-type: none"> Nilzan @ 0.33 ml/kg body weight once especially in lower altitudes.
Poultry	All susceptible age groups	Coccidiosis	<ul style="list-style-type: none"> Give Supercox@1g/lit of water for 4 – 5 days.
		Ranikhet	<ul style="list-style-type: none"> - Vaccinate with strain live vaccine @ one drop on eyes or nostril at 7th day. Give Lasota strain at 10-12 weeks. Give R2B vaccine at the age of 45-60 days @0.5 ml (intra-muscularly). Give Ranikhet (ND) killed vaccine (0.2 ml intra-muscularly) at 18-20 weeks.
			<ul style="list-style-type: none"> - Provide external heat source. As RH is likely to remain above 65%, check for damping in litter material. If found, replace it, as it may cause less production in layers and respiratory disease in chicks due to high Ammonia and reduced Oxygen content leading to growth retardation (environmentally induced nutritional stress). Also, it may lead to many diseases (viral, bacterial, fungal, protozoan).
	All susceptible age groups	De-worming	<ul style="list-style-type: none"> - De-worm with Piperazine Hexahydrate @ 20 ml/ 3.5 lit and repeat after 7 days.
	Chick upto 5 days		<ul style="list-style-type: none"> - Provide Furavet powder @ 1 g/ 2 lit of drinking water and Vimeral @ 5ml/ lit of water.



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



“Integrated Agromet Advisory Services”

MANIPUR BULLETIN
8th January, 2013

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 9th to 13th January, 2013 as given below:

<u>Significant past weather for the preceding bi-weekly of Imphal - West (4th to 7th January, 2013)</u>	<u>Weather forecast for next five days of Chandel (9th to 13th January, 2013)</u>
<p>During the past four days the sky was mainly clear to partly cloudy but mainly cloudy during morning hours of 2nd Jan. No rainfall was recorded during past four days. Maximum temperature range observed was 18.0 – 23.4 °C, range of minimum temperature observed was 1.4 – 2.5 °C, mean relative humidity observed in morning and afternoon were 86.75 % and 40.0 % respectively. The average wind speed range was 1.5 – 2.5 km/hr.</p>	<p>There is likely of no rain during next five days. The sky is likely to clear to mainly clear. The maximum temp. is likely to be 18.0 - 23.0 °C. The minimum temp. is likely to be 2.0 - 5.0 °C. The maximum RH is likely to attain a max value of 77 %. Minimum RH is likely to reach a max of 54 %. The average wind speed during next five days may reach upto max. value of 8 km/hr.</p>

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
Field Crops			
Zero tillage Rapeseed	Vegetative		<ul style="list-style-type: none"> - Top dress and irrigate. - Thinning must be done where plant population is high.
Rabi Maize	Vegetative		<ul style="list-style-type: none"> - Irrigation may be done. - After earthing up, top dress with nitrogen fertilizer when the plant is knee high.
Storage			<ul style="list-style-type: none"> - Seeds of crops like rice, soybean, groundnut, etc. must be stored in RC-seed bins after proper drying. Check for germination of seeds. Clean and dry the seeds.
Horticulture Crops			
<ul style="list-style-type: none"> - As the weather is foggy during morning and evening, smoking (using straw/ husk of rice) may be done in and around those crop field in which the crop is in vegetative stage, specially for solanaceae crop. Irrigation may be done to keep soil moist. 			
Papaya	Nursery		<ul style="list-style-type: none"> Sowing may be done. Recommended varieties are- Coorg Honey, Ranchi Dwarf and Amit Sagar.
Citrus (Orange, Lemon, Lime)	Seed collection & nursery		<ul style="list-style-type: none"> - Collect healthy & mature fruits from disease free tree and raise nursery. - In grown-up trees, remove water sprouts, dried leaves and dead branches and paint the cut ends with Bordeaux paste.
Cucurbits	Nursery		<ul style="list-style-type: none"> Nurseries of gourd, sponge gourd, bitter gourd, pumpkin, etc. may be raised in polybags (2x3 inches) or pro-trays under polyhouse.
Dolichos bean	Fruiting	Aphid	<ul style="list-style-type: none"> - Watering to wash off the aphid is required as the crop is in fruiting stage.
Onion/ Garlic	Vegetative		<ul style="list-style-type: none"> - Light and frequent watering is required.
Potato	Vegetative		<ul style="list-style-type: none"> - For crop in vegetative stage (40-45 days) with 4-6 leaves stage, top dress with 25 kg DAP/ sangam followed earthing-up of ridges and light irrigation to keep the soil moist.
Pea	Vegetative to flowering		<ul style="list-style-type: none"> - Avoid nipping of young shoots at vegetative stage as it will delay fruiting and reduce the yield. Spray Bayleton @ 0.7g/ 10 lit of water if incidence of powdery mildew is observed.
Cole crops	Nursery and transplanting to vegetative Harvesting of broccoli		<ul style="list-style-type: none"> - Light and frequent watering is required. - Harvesting of Broccoli must be done when the head/ bud are compact, before it gets open. Maintain stalk length of 10-15 cm while harvesting.



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



“Integrated Agromet Advisory Services”

Fisheries

Type of Farming	Agro-meteorological advisories
Carp culture	<ul style="list-style-type: none"> Renew half of the culture pond water with clean and fresh water regularly Depth of pond water should be maintained at 1.0 – 1.5 m. If there is problem in maintaining water level of large area then thinning of fish population may be done and culture pond area may be reduced. Also, maintain stock density @ 5000 fishes/ ha. Feed should be given @ 2 % of body weight per day. As a disinfectant, regularly apply CIFAX/ lime in culture pond in small quantity at an interval of 15-20 days.

Animal Sciences

* Use Butox @ 2 ml/lit of water and brush the animal / spray the solution once/ twice in a week against external parasites (Mites) in cattle/ buffalo/ Mithun, goat/ sheep and (Mange) in pig.

Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
Pig	Above 3 months of age	Internal parasite Swine Fever	<ul style="list-style-type: none"> - De-worm using Panacur @ 1 tab/10 kg body weight orally once only and repeat after one month. - Vaccinate against Swine Fever (animals of above 3 months of age).
	All susceptible age groups	Coccidiosis	<ul style="list-style-type: none"> - Advocate Metaprim @ 2g/ 10 kg body weight for 5-7 days, include electrolyte powder.
Cattle / Buffalo/ Mithun	All age groups except three months or below	FMD	<ul style="list-style-type: none"> - FMD vaccination maybe done at the first age of 4 months. It must be repeated after 6 months then annually.
		Internal parasite	<ul style="list-style-type: none"> Nilzan @ 0.33 ml/kg body weight once especially in lower altitudes.
Poultry	All susceptible age groups	Coccidiosis	<ul style="list-style-type: none"> Give Supercox@1g/lit of water for 4 – 5 days.
		Ranikhet	<ul style="list-style-type: none"> - Vaccinate with strain live vaccine @ one drop on eyes or nostril at 7th day. Give Lasota strain at 10-12 weeks. Give R2B vaccine at the age of 45-60 days @0.5 ml (intra-muscularly). Give Ranikhet (ND) killed vaccine (0.2 ml intra-muscularly) at 18-20 weeks.
			<ul style="list-style-type: none"> - Provide external heat source. As RH is likely to remain above 65%, check for damping in litter material. If found, replace it, as it may cause less production in layers and respiratory disease in chicks due to high Ammonia and reduced Oxygen content leading to growth retardation (environmentally induced nutritional stress). Also, it may lead to many diseases (viral, bacterial, fungal, protozoan).
	All susceptible age groups	De-worming	<ul style="list-style-type: none"> - De-worm with Piperazine Hexahydrate @ 20 ml/ 3.5 lit and repeat after 7 days.
	Chick upto 5 days		<ul style="list-style-type: none"> - Provide Furavet powder @ 1 g/ 2 lit of drinking water and Vimeral @ 5ml/ lit of water.



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



“Integrated Agromet Advisory Services”

MANIPUR BULLETIN
8th January, 2013

Churachandpur

IAAS, ICAR-RC Manipur Centre in association with India Meteorological Department, Regional Meteorological Centre, Guwahati and Northern Hemisphere Analysis Centre, New Delhi, Ministry of Earth Science, Govt. of India reports the weather forecasts for the next five days, i.e., from 9th to 13th January, 2013 as given below:

<u>Significant past weather for the preceding bi-weekly of Imphal - West (4th to 7th January, 2013)</u>	<u>Weather forecast for next five days of Churachandpur (9th to 13th January, 2013)</u>
<p>During the past four days the sky was mainly clear to partly cloudy but mainly cloudy during morning hours of 2nd Jan. No rainfall was recorded during past four days. Maximum temperature range observed was 18.0 – 23.4 °C, range of minimum temperature observed was 1.4 – 2.5 °C, mean relative humidity observed in morning and afternoon were 86.75 % and 40.0 % respectively. The average wind speed range was 1.5 – 2.5 km/hr.</p>	<p>There is likely of no rain during next five days. The sky is likely to clear to mainly clear. The maximum temp. is likely to be 18.0 - 21.0 °C. The minimum temp. is likely to be 2.0 - 4.0 °C. The maximum RH is likely to attain a max value of 88 %. Minimum RH is likely to reach a max of 62 %. The average wind speed during next five days may reach upto max. value of 4 km/hr.</p>

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
Field Crops			
Zero tillage Rapeseed	Vegetative		<ul style="list-style-type: none"> - Top dress and irrigate. - Thinning must be done where plant population is high.
Rabi Maize	Vegetative		<ul style="list-style-type: none"> - Irrigation may be done. - After earthing up, top dress with nitrogen fertilizer when the plant is knee high.
Storage			<ul style="list-style-type: none"> - Seeds of crops like rice, soybean, groundnut, etc. must be stored in RC-seed bins after proper drying. Check for germination of seeds. Clean and dry the seeds.
Horticulture Crops			
<ul style="list-style-type: none"> - As the weather is foggy during morning and evening, smoking (using straw/ husk of rice) may be done in and around those crop field in which the crop is in vegetative stage, specially for solanaceae crop. Irrigation may be done to keep soil moist. 			
Papaya	Nursery		<ul style="list-style-type: none"> Sowing may be done. Recommended varieties are- Coorg Honey, Ranchi Dwarf and Amit Sagar.
Citrus (Orange, Lemon, Lime)	Seed collection & nursery		<ul style="list-style-type: none"> - Collect healthy & mature fruits from disease free tree and raise nursery. - In grown-up trees, remove water sprouts, dried leaves and dead branches and paint the cut ends with Bordeaux paste.
Cucurbits	Nursery		<ul style="list-style-type: none"> Nurseries of gourd, sponge gourd, bitter gourd, pumpkin, etc. may be raised in polybags (2x3 inches) or pro-trays under polyhouse.
Dolichos bean	Fruiting	Aphid	<ul style="list-style-type: none"> - Watering to wash off the aphid is required as the crop is in fruiting stage.
Onion/ Garlic	Vegetative		<ul style="list-style-type: none"> - Light and frequent watering is required.
Potato	Vegetative		<ul style="list-style-type: none"> - For crop in vegetative stage (40-45 days) with 4-6 leaves stage, top dress with 25 kg DAP/ sangam followed earthing-up of ridges and light irrigation to keep the soil moist.
Pea	Vegetative to flowering		<ul style="list-style-type: none"> - Avoid nipping of young shoots at vegetative stage as it will delay fruiting and reduce the yield. Spray Bayleton @ 0.7g/ 10 lit of water if incidence of powdery mildew is observed.
Cole crops	Nursery and transplanting to vegetative Harvesting of broccoli		<ul style="list-style-type: none"> - Light and frequent watering is required. - Harvesting of Broccoli must be done when the head/ bud are compact, before it gets open. Maintain stalk length of 10-15 cm while harvesting.



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



“Integrated Agromet Advisory Services”

Fisheries

Type of Farming	Agro-meteorological advisories
Carp culture	<ul style="list-style-type: none"> Renew half of the culture pond water with clean and fresh water regularly Depth of pond water should be maintained at 1.0 – 1.5 m. If there is problem in maintaining water level of large area then thinning of fish population may be done and culture pond area may be reduced. Also, maintain stock density @ 5000 fishes/ ha. Feed should be given @ 2 % of body weight per day. As a disinfectant, regularly apply CIFAX/ lime in culture pond in small quantity at an interval of 15-20 days.

Animal Sciences

* Use Butox @ 2 ml/lit of water and brush the animal / spray the solution once/ twice in a week against external parasites (Mites) in cattle/ buffalo/ Mithun, goat/ sheep and (Mange) in pig.

Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
Pig	Above 3 months of age	Internal parasite Swine Fever	<ul style="list-style-type: none"> - De-worm using Panacur @ 1 tab/10 kg body weight orally once only and repeat after one month. - Vaccinate against Swine Fever (animals of above 3 months of age).
	All susceptible age groups	Coccidiosis	<ul style="list-style-type: none"> - Advocate Metaprim @ 2g/ 10 kg body weight for 5-7 days, include electrolyte powder.
Cattle / Buffalo/ Mithun	All age groups except three months or below	FMD	<ul style="list-style-type: none"> - FMD vaccination maybe done at the first age of 4 months. It must be repeated after 6 months then annually.
		Internal parasite	<ul style="list-style-type: none"> Nilzan @ 0.33 ml/kg body weight once especially in lower altitudes.
Poultry	All susceptible age groups	Coccidiosis	<ul style="list-style-type: none"> Give Supercox@1g/lit of water for 4 – 5 days.
		Ranikhet	<ul style="list-style-type: none"> - Vaccinate with strain live vaccine @ one drop on eyes or nostril at 7th day. Give Lasota strain at 10-12 weeks. Give R2B vaccine at the age of 45-60 days @0.5 ml (intra-muscularly). Give Ranikhet (ND) killed vaccine (0.2 ml intra-muscularly) at 18-20 weeks.
			<ul style="list-style-type: none"> - Provide external heat source. As RH is likely to remain above 65%, check for damping in litter material. If found, replace it, as it may cause less production in layers and respiratory disease in chicks due to high Ammonia and reduced Oxygen content leading to growth retardation (environmentally induced nutritional stress). Also, it may lead to many diseases (viral, bacterial, fungal, protozoan).
	All susceptible age groups	De-worming	<ul style="list-style-type: none"> - De-worm with Piperazine Hexahydrate @ 20 ml/ 3.5 lit and repeat after 7 days.
	Chick upto 5 days		<ul style="list-style-type: none"> - Provide Furavet powder @ 1 g/ 2 lit of drinking water and Vimeral @ 5ml/ lit of water.



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



“Integrated Agromet Advisory Services”

MANIPUR BULLETIN
8th January, 2013

Imphal-East

IAAS, ICAR-RC Manipur Centre in association with India Meteorological Department, Regional Meteorological Centre, Guwahati and Northern Hemisphere Analysis Centre, New Delhi, Ministry of Earth Science, Govt. of India reports the weather forecasts for the next five days, i.e., from 9th to 13th January, 2013 as given below:

<u>Significant past weather for the preceding bi-weekly of Imphal - West (4th to 7th January, 2013)</u>	<u>Weather forecast for next five days of Imphal-East (9th to 13th January, 2013)</u>
<p>During the past four days the sky was mainly clear to partly cloudy but mainly cloudy during morning hours of 2nd Jan. No rainfall was recorded during past four days. Maximum temperature range observed was 18.0 – 23.4 °C, range of minimum temperature observed was 1.4 – 2.5 °C, mean relative humidity observed in morning and afternoon were 86.75 % and 40.0 % respectively. The average wind speed range was 1.5 – 2.5 km/hr.</p>	<p>There is likely of no rain during next five days. The sky is likely to clear to mainly clear. The maximum temp. is likely to be 17.0 - 21.0 °C. The minimum temp. is likely to be 2.0 - 4.0 °C. The maximum RH is likely to attain a max value of 83 %. Minimum RH is likely to reach a max of 52 %. The average wind speed during next five days may reach upto max. value of 4 km/hr.</p>

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
Field Crops			
Zero tillage Rapeseed	Vegetative		<ul style="list-style-type: none"> - Top dress and irrigate. - Thinning must be done where plant population is high.
Rabi Maize	Vegetative		<ul style="list-style-type: none"> - Irrigation may be done. - After earthing up, top dress with nitrogen fertilizer when the plant is knee high.
Storage			<ul style="list-style-type: none"> - Seeds of crops like rice, soybean, groundnut, etc. must be stored in RC-seed bins after proper drying. Check for germination of seeds. Clean and dry the seeds.
Horticulture Crops			
<ul style="list-style-type: none"> - As the weather is foggy during morning and evening, smoking (using straw/ husk of rice) may be done in and around those crop field in which the crop is in vegetative stage, specially for solanaceae crop. Irrigation may be done to keep soil moist. 			
Papaya	Nursery		<ul style="list-style-type: none"> Sowing may be done. Recommended varieties are- Coorg Honey, Ranchi Dwarf and Amit Sagar.
Citrus (Orange, Lemon, Lime)	Seed collection & nursery		<ul style="list-style-type: none"> - Collect healthy & mature fruits from disease free tree and raise nursery. - In grown-up trees, remove water sprouts, dried leaves and dead branches and paint the cut ends with Bordeaux paste.
Cucurbits	Nursery		<ul style="list-style-type: none"> Nurseries of gourd, sponge gourd, bitter gourd, pumpkin, etc. may be raised in polybags (2x3 inches) or pro-trays under polyhouse.
Dolichos bean	Fruiting	Aphid	<ul style="list-style-type: none"> - Watering to wash off the aphid is required as the crop is in fruiting stage.
Onion/ Garlic	Vegetative		<ul style="list-style-type: none"> - Light and frequent watering is required.
Potato	Vegetative		<ul style="list-style-type: none"> - For crop in vegetative stage (40-45 days) with 4-6 leaves stage, top dress with 25 kg DAP/ sangam followed earthing-up of ridges and light irrigation to keep the soil moist.
Pea	Vegetative to flowering		<ul style="list-style-type: none"> - Avoid nipping of young shoots at vegetative stage as it will delay fruiting and reduce the yield. Spray Bayleton @ 0.7g/ 10 lit of water if incidence of powdery mildew is observed.
Cole crops	Nursery and transplanting to vegetative Harvesting of broccoli		<ul style="list-style-type: none"> - Light and frequent watering is required. - Harvesting of Broccoli must be done when the head/ bud are compact, before it gets open. Maintain stalk length of 10-15 cm while harvesting.



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



“Integrated Agromet Advisory Services”

Fisheries

Type of Farming	Agro-meteorological advisories
Carp culture	<ul style="list-style-type: none"> Renew half of the culture pond water with clean and fresh water regularly Depth of pond water should be maintained at 1.0 – 1.5 m. If there is problem in maintaining water level of large area then thinning of fish population may be done and culture pond area may be reduced. Also, maintain stock density @ 5000 fishes/ ha. Feed should be given @ 2 % of body weight per day. As a disinfectant, regularly apply CIFAX/ lime in culture pond in small quantity at an interval of 15-20 days.

Animal Sciences

* Use Butox @ 2 ml/lit of water and brush the animal / spray the solution once/ twice in a week against external parasites (Mites) in cattle/ buffalo/ Mithun, goat/ sheep and (Mange) in pig.

Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
Pig	Above 3 months of age	Internal parasite Swine Fever	<ul style="list-style-type: none"> - De-worm using Panacur @ 1 tab/10 kg body weight orally once only and repeat after one month. - Vaccinate against Swine Fever (animals of above 3 months of age).
	All susceptible age groups	Coccidiosis	<ul style="list-style-type: none"> - Advocate Metaprim @ 2g/ 10 kg body weight for 5-7 days, include electrolyte powder.
Cattle / Buffalo/ Mithun	All age groups except three months or below	FMD	<ul style="list-style-type: none"> - FMD vaccination maybe done at the first age of 4 months. It must be repeated after 6 months then annually.
		Internal parasite	<ul style="list-style-type: none"> Nilzan @ 0.33 ml/kg body weight once especially in lower altitudes.
Poultry	All susceptible age groups	Coccidiosis	<ul style="list-style-type: none"> Give Supercox@1g/lit of water for 4 – 5 days.
		Ranikhet	<ul style="list-style-type: none"> - Vaccinate with strain live vaccine @ one drop on eyes or nostril at 7th day. Give Lasota strain at 10-12 weeks. Give R2B vaccine at the age of 45-60 days @0.5 ml (intra-muscularly). Give Ranikhet (ND) killed vaccine (0.2 ml intra-muscularly) at 18-20 weeks.
			<ul style="list-style-type: none"> - Provide external heat source. As RH is likely to remain above 65%, check for damping in litter material. If found, replace it, as it may cause less production in layers and respiratory disease in chicks due to high Ammonia and reduced Oxygen content leading to growth retardation (environmentally induced nutritional stress). Also, it may lead to many diseases (viral, bacterial, fungal, protozoan).
	All susceptible age groups	De-worming	<ul style="list-style-type: none"> - De-worm with Piperazine Hexahydrate @ 20 ml/ 3.5 lit and repeat after 7 days.
	Chick upto 5 days		<ul style="list-style-type: none"> - Provide Furavet powder @ 1 g/ 2 lit of drinking water and Vimeral @ 5ml/ lit of water.



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

MANIPUR BULLETIN
8th January, 2013

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 9th to 13th January, 2013 as given below:

<u>Significant past weather for the preceding bi-weekly of Imphal - West (4th to 7th January, 2013)</u>	<u>Weather forecast for next five days of Imphal- West (9th to 13th January, 2013)</u>
<p>During the past four days the sky was mainly clear to partly cloudy but mainly cloudy during morning hours of 2nd Jan. No rainfall was recorded during past four days. Maximum temperature range observed was 18.0 – 23.4 °C, range of minimum temperature observed was 1.4 – 2.5 °C, mean relative humidity observed in morning and afternoon were 86.75 % and 40.0 % respectively. The average wind speed range was 1.5 – 2.5 km/hr.</p>	<p>There is likely of no rain during next five days. The sky is likely to clear to mainly clear. The maximum temp. is likely to be 16.0 - 20.0 °C. The minimum temp. is likely to be 1.0 - 3.0 °C. The maximum RH is likely to attain a max value of 72 %. Minimum RH is likely to reach a max of 66 %. The average wind speed during next five days may reach upto max. value of 4 km/hr.</p>

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
Field Crops			
Zero tillage Rapeseed	Vegetative		<ul style="list-style-type: none"> - Top dress and irrigate. - Thinning must be done where plant population is high.
Rabi Maize	Vegetative		<ul style="list-style-type: none"> - Irrigation may be done. - After earthing up, top dress with nitrogen fertilizer when the plant is knee high.
Storage			<ul style="list-style-type: none"> - Seeds of crops like rice, soybean, groundnut, etc. must be stored in RC-seed bins after proper drying. Check for germination of seeds. Clean and dry the seeds.
Horticulture Crops			
<ul style="list-style-type: none"> - As the weather is foggy during morning and evening, smoking (using straw/ husk of rice) may be done in and around those crop field in which the crop is in vegetative stage, specially for solanaceae crop. Irrigation may be done to keep soil moist. 			
Papaya	Nursery		<ul style="list-style-type: none"> Sowing may be done. Recommended varieties are- Coorg Honey, Ranchi Dwarf and Amit Sagar.
Citrus (Orange, Lemon, Lime)	Seed collection & nursery		<ul style="list-style-type: none"> - Collect healthy & mature fruits from disease free tree and raise nursery. - In grown-up trees, remove water sprouts, dried leaves and dead branches and paint the cut ends with Bordeaux paste.
Cucurbits	Nursery		<ul style="list-style-type: none"> Nurseries of gourd, sponge gourd, bitter gourd, pumpkin, etc. may be raised in polybags (2x3 inches) or pro-trays under polyhouse.
Dolichos bean	Fruiting	Aphid	<ul style="list-style-type: none"> - Watering to wash off the aphid is required as the crop is in fruiting stage.
Onion/ Garlic	Vegetative		<ul style="list-style-type: none"> - Light and frequent watering is required.
Potato	Vegetative		<ul style="list-style-type: none"> - For crop in vegetative stage (40-45 days) with 4-6 leaves stage, top dress with 25 kg DAP/ sangam followed earthing-up of ridges and light irrigation to keep the soil moist.
Pea	Vegetative to flowering		<ul style="list-style-type: none"> - Avoid nipping of young shoots at vegetative stage as it will delay fruiting and reduce the yield. Spray Bayleton @ 0.7g/ 10 lit of water if incidence of powdery mildew is observed.
Cole crops	Nursery and transplanting to vegetative Harvesting of broccoli		<ul style="list-style-type: none"> - Light and frequent watering is required. - Harvesting of Broccoli must be done when the head/ bud are compact, before it gets open. Maintain stalk length of 10-15 cm while harvesting.



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“Integrated Agromet Advisory Services”

Fisheries

Type of Farming	Agro-meteorological advisories
Carp culture	<ul style="list-style-type: none"> Renew half of the culture pond water with clean and fresh water regularly Depth of pond water should be maintained at 1.0 – 1.5 m. If there is problem in maintaining water level of large area then thinning of fish population may be done and culture pond area may be reduced. Also, maintain stock density @ 5000 fishes/ ha. Feed should be given @ 2 % of body weight per day. As a disinfectant, regularly apply CIFAX/ lime in culture pond in small quantity at an interval of 15-20 days.

Animal Sciences

* Use Butox @ 2 ml/lit of water and brush the animal / spray the solution once/ twice in a week against external parasites (Mites) in cattle/ buffalo/ Mithun, goat/ sheep and (Mange) in pig.

Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
Pig	Above 3 months of age	Internal parasite Swine Fever	<ul style="list-style-type: none"> - De-worm using Panacur @ 1 tab/10 kg body weight orally once only and repeat after one month. - Vaccinate against Swine Fever (animals of above 3 months of age).
	All susceptible age groups	Coccidiosis	<ul style="list-style-type: none"> - Advocate Metaprim @ 2g/ 10 kg body weight for 5-7 days, include electrolyte powder.
Cattle / Buffalo/ Mithun	All age groups except three months or below	FMD	<ul style="list-style-type: none"> - FMD vaccination maybe done at the first age of 4 months. It must be repeated after 6 months then annually.
		Internal parasite	<ul style="list-style-type: none"> Nilzan @ 0.33 ml/kg body weight once especially in lower altitudes.
Poultry	All susceptible age groups	Coccidiosis	<ul style="list-style-type: none"> Give Supercox@1g/lit of water for 4 – 5 days.
		Ranikhet	<ul style="list-style-type: none"> - Vaccinate with strain live vaccine @ one drop on eyes or nostril at 7th day. Give Lasota strain at 10-12 weeks. Give R2B vaccine at the age of 45-60 days @0.5 ml (intra-muscularly). Give Ranikhet (ND) killed vaccine (0.2 ml intra-muscularly) at 18-20 weeks.
			<ul style="list-style-type: none"> - Provide external heat source. As RH is likely to remain above 65%, check for damping in litter material. If found, replace it, as it may cause less production in layers and respiratory disease in chicks due to high Ammonia and reduced Oxygen content leading to growth retardation (environmentally induced nutritional stress). Also, it may lead to many diseases (viral, bacterial, fungal, protozoan).
	All susceptible age groups	De-worming	<ul style="list-style-type: none"> - De-worm with Piperazine Hexahydrate @ 20 ml/ 3.5 lit and repeat after 7 days.
	Chick upto 5 days		<ul style="list-style-type: none"> - Provide Furavet powder @ 1 g/ 2 lit of drinking water and Vimeral @ 5ml/ lit of water.



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MANIPUR BULLETIN
8th January, 2013

Senapati

IAAS, ICAR-RC Manipur Centre in association with India Meteorological Department, Regional Meteorological Centre, Guwahati and Northern Hemisphere Analysis Centre, New Delhi, Ministry of Earth Science, Govt. of India reports the weather forecasts for the next five days, i.e., from 9th to 13th January, 2013 as given below:

<u>Significant past weather for the preceding bi-weekly of Imphal - West (4th to 7th January, 2013)</u>	<u>Weather forecast for next five days of Senapati (9th to 13th January, 2013)</u>
<p>During the past four days the sky was mainly clear to partly cloudy but mainly cloudy during morning hours of 2nd Jan. No rainfall was recorded during past four days. Maximum temperature range observed was 18.0 – 23.4 °C, range of minimum temperature observed was 1.4 – 2.5 °C, mean relative humidity observed in morning and afternoon were 86.75 % and 40.0 % respectively. The average wind speed range was 1.5 – 2.5 km/hr.</p>	<p>There is likely of no rain during next five days. The sky is likely to clear to mainly clear. The maximum temp. is likely to be 16.0 - 20.0 °C. The minimum temp. is likely to be 0.0 - 3.0 °C. The maximum RH is likely to attain a max value of 89 %. Minimum RH is likely to reach a max of 56 %. The average wind speed during next five days may reach upto max. value of 4 km/hr.</p>

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
Field Crops			
Zero tillage Rapeseed	Vegetative		<ul style="list-style-type: none"> - Top dress and irrigate. - Thinning must be done where plant population is high.
Rabi Maize	Vegetative		<ul style="list-style-type: none"> - Irrigation may be done. - After earthing up, top dress with nitrogen fertilizer when the plant is knee high.
Storage			<ul style="list-style-type: none"> - Seeds of crops like rice, soybean, groundnut, etc. must be stored in RC-seed bins after proper drying. Check for germination of seeds. Clean and dry the seeds.
Horticulture Crops			
<ul style="list-style-type: none"> - As the weather is foggy during morning and evening, smoking (using straw/ husk of rice) may be done in and around those crop field in which the crop is in vegetative stage, specially for solanaceae crop. Irrigation may be done to keep soil moist. 			
Papaya	Nursery		<ul style="list-style-type: none"> Sowing may be done. Recommended varieties are- Coorg Honey, Ranchi Dwarf and Amit Sagar.
Citrus (Orange, Lemon, Lime)	Seed collection & nursery		<ul style="list-style-type: none"> - Collect healthy & mature fruits from disease free tree and raise nursery. - In grown-up trees, remove water sprouts, dried leaves and dead branches and paint the cut ends with Bordeaux paste.
Cucurbits	Nursery		<ul style="list-style-type: none"> Nurseries of gourd, sponge gourd, bitter gourd, pumpkin, etc. may be raised in polybags (2x3 inches) or pro-trays under polyhouse.
Dolichos bean	Fruiting	Aphid	<ul style="list-style-type: none"> - Watering to wash off the aphid is required as the crop is in fruiting stage.
Onion/ Garlic	Vegetative		<ul style="list-style-type: none"> - Light and frequent watering is required.
Potato	Vegetative		<ul style="list-style-type: none"> - For crop in vegetative stage (40-45 days) with 4-6 leaves stage, top dress with 25 kg DAP/ sangam followed earthing-up of ridges and light irrigation to keep the soil moist.
Pea	Vegetative to flowering		<ul style="list-style-type: none"> - Avoid nipping of young shoots at vegetative stage as it will delay fruiting and reduce the yield. Spray Bayleton @ 0.7g/ 10 lit of water if incidence of powdery mildew is observed.
Cole crops	Vegetative		<ul style="list-style-type: none"> - Light and frequent watering is required.



“Integrated Agromet Advisory Services”

Fisheries

Type of Farming	Agro-meteorological advisories
Carp culture	<ul style="list-style-type: none"> Renew half of the culture pond water with clean and fresh water regularly Depth of pond water should be maintained at 1.0 – 1.5 m. If there is problem in maintaining water level of large area then thinning of fish population may be done and culture pond area may be reduced. Also, maintain stock density @ 5000 fishes/ ha. Feed should be given @ 2 % of body weight per day. As a disinfectant, regularly apply CIFAX/ lime in culture pond in small quantity at an interval of 15-20 days.

Animal Sciences

* Use Butox @ 2 ml/lit of water and brush the animal / spray the solution once/ twice in a week against external parasites (Mites) in cattle/ buffalo/ Mithun, goat/ sheep and (Mange) in pig.

Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
Pig	Above 3 months of age	Internal parasite Swine Fever	<ul style="list-style-type: none"> - De-worm using Panacur @ 1 tab/10 kg body weight orally once only and repeat after one month. - Vaccinate against Swine Fever (animals of above 3 months of age).
	All susceptible age groups	Coccidiosis	<ul style="list-style-type: none"> - Advocate Metaprim @ 2g/ 10 kg body weight for 5-7 days, include electrolyte powder.
Cattle / Buffalo/ Mithun	All age groups except three months or below	FMD	<ul style="list-style-type: none"> - FMD vaccination maybe done at the first age of 4 months. It must be repeated after 6 months then annually.
		Internal parasite	<ul style="list-style-type: none"> Nilzan @ 0.33 ml/kg body weight once especially in lower altitudes.
Poultry	All susceptible age groups	Coccidiosis	<ul style="list-style-type: none"> Give Supercox@1g/lit of water for 4 – 5 days.
		Ranikhet	<ul style="list-style-type: none"> - Vaccinate with strain live vaccine @ one drop on eyes or nostril at 7th day. Give Lasota strain at 10-12 weeks. Give R2B vaccine at the age of 45-60 days @0.5 ml (intra-muscularly). Give Ranikhet (ND) killed vaccine (0.2 ml intra-muscularly) at 18-20 weeks.
			<ul style="list-style-type: none"> - Provide external heat source. As RH is likely to remain above 65%, check for damping in litter material. If found, replace it, as it may cause less production in layers and respiratory disease in chicks due to high Ammonia and reduced Oxygen content leading to growth retardation (environmentally induced nutritional stress). Also, it may lead to many diseases (viral, bacterial, fungal, protozoan).
	All susceptible age groups	De-worming	<ul style="list-style-type: none"> - De-worm with Piperazine Hexahydrate @ 20 ml/ 3.5 lit and repeat after 7 days.
	Chick upto 5 days		<ul style="list-style-type: none"> - Provide Furavet powder @ 1 g/ 2 lit of drinking water and Vimeral @ 5ml/ lit of water.



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MANIPUR BULLETIN
8th January, 2013

Tamenglong

IAAS, ICAR-RC Manipur Centre in association with India Meteorological Department, Regional Meteorological Centre, Guwahati and Northern Hemisphere Analysis Centre, New Delhi, Ministry of Earth Science, Govt. of India reports the weather forecasts for the next five days, i.e., from 9th to 13th January, 2013 as given below:

<u>Significant past weather for the preceding bi-weekly of Imphal - West (4th to 7th January, 2013)</u>	<u>Weather forecast for next five days of Tamenglong (9th to 13th January, 2013)</u>
<p>During the past four days the sky was mainly clear to partly cloudy but mainly cloudy during morning hours of 2nd Jan. No rainfall was recorded during past four days. Maximum temperature range observed was 18.0 – 23.4 °C, range of minimum temperature observed was 1.4 – 2.5 °C, mean relative humidity observed in morning and afternoon were 86.75 % and 40.0 % respectively. The average wind speed range was 1.5 – 2.5 km/hr.</p>	<p>There is likely of no rain during next five days. The sky is likely to clear to mainly clear. The maximum temp. is likely to be 20.0 - 23.0 °C. The minimum temp. is likely to be 3.0 - 6.0 °C. The maximum RH is likely to attain a max value of 75 %. Minimum RH is likely to reach a max of 59 %. The average wind speed during next five days may reach upto max. value of 3 km/hr.</p>

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
Field Crops			
Zero tillage Rapeseed	Vegetative		<ul style="list-style-type: none"> - Top dress and irrigate. - Thinning must be done where plant population is high.
Rabi Maize	Vegetative		<ul style="list-style-type: none"> - Irrigation may be done. - After earthing up, top dress with nitrogen fertilizer when the plant is knee high.
Storage			<ul style="list-style-type: none"> - Seeds of crops like rice, soybean, groundnut, etc. must be stored in RC-seed bins after proper drying. Check for germination of seeds. Clean and dry the seeds.
Horticulture Crops			
<ul style="list-style-type: none"> - As the weather is foggy during morning and evening, smoking (using straw/ husk of rice) may be done in and around those crop field in which the crop is in vegetative stage, specially for solanaceae crop. Irrigation may be done to keep soil moist. 			
Papaya	Nursery		<ul style="list-style-type: none"> Sowing may be done. Recommended varieties are- Coorg Honey, Ranchi Dwarf and Amit Sagar.
Citrus (Orange, Lemon, Lime)	Seed collection & nursery		<ul style="list-style-type: none"> - Collect healthy & mature fruits from disease free tree and raise nursery. - In grown-up trees, remove water sprouts, dried leaves and dead branches and paint the cut ends with Bordeaux paste.
Cucurbits	Nursery		<ul style="list-style-type: none"> Nurseries of gourd, sponge gourd, bitter gourd, pumpkin, etc. may be raised in polybags (2x3 inches) or pro-trays under polyhouse.
Dolichos bean	Fruiting	Aphid	<ul style="list-style-type: none"> - Watering to wash off the aphid is required as the crop is in fruiting stage.
Onion/ Garlic	Vegetative		<ul style="list-style-type: none"> - Light and frequent watering is required.
Potato	Vegetative		<ul style="list-style-type: none"> - For crop in vegetative stage (40-45 days) with 4-6 leaves stage, top dress with 25 kg DAP/ sangam followed earthing-up of ridges and light irrigation to keep the soil moist.
Pea	Vegetative to flowering		<ul style="list-style-type: none"> - Avoid nipping of young shoots at vegetative stage as it will delay fruiting and reduce the yield. Spray Bayleton @ 0.7g/ 10 lit of water if incidence of powdery mildew is observed.
Cole crops	Nursery and transplanting to vegetative Harvesting of broccoli		<ul style="list-style-type: none"> - Light and frequent watering is required. - Harvesting of Broccoli must be done when the head/ bud are compact, before it gets open. Maintain stalk length of 10-15 cm while harvesting.



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“Integrated Agromet Advisory Services”

Fisheries

Type of Farming	Agro-meteorological advisories
Carp culture	<ul style="list-style-type: none"> Renew half of the culture pond water with clean and fresh water regularly Depth of pond water should be maintained at 1.0 – 1.5 m. If there is problem in maintaining water level of large area then thinning of fish population may be done and culture pond area may be reduced. Also, maintain stock density @ 5000 fishes/ ha. Feed should be given @ 2 % of body weight per day. As a disinfectant, regularly apply CIFAX/ lime in culture pond in small quantity at an interval of 15-20 days.

Animal Sciences

* Use Butox @ 2 ml/lit of water and brush the animal / spray the solution once/ twice in a week against external parasites (Mites) in cattle/ buffalo/ Mithun, goat/ sheep and (Mange) in pig.

Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
Pig	Above 3 months of age	Internal parasite Swine Fever	<ul style="list-style-type: none"> - De-worm using Panacur @ 1 tab/10 kg body weight orally once only and repeat after one month. - Vaccinate against Swine Fever (animals of above 3 months of age).
	All susceptible age groups	Coccidiosis	<ul style="list-style-type: none"> - Advocate Metaprim @ 2g/ 10 kg body weight for 5-7 days, include electrolyte powder.
Cattle / Buffalo/ Mithun	All age groups except three months or below	FMD	<ul style="list-style-type: none"> - FMD vaccination maybe done at the first age of 4 months. It must be repeated after 6 months then annually.
		Internal parasite	<ul style="list-style-type: none"> Nilzan @ 0.33 ml/kg body weight once especially in lower altitudes.
Poultry	All susceptible age groups	Coccidiosis	<ul style="list-style-type: none"> Give Supercox@1g/lit of water for 4 – 5 days.
		Ranikhet	<ul style="list-style-type: none"> - Vaccinate with strain live vaccine @ one drop on eyes or nostril at 7th day. Give Lasota strain at 10-12 weeks. Give R2B vaccine at the age of 45-60 days @0.5 ml (intra-muscularly). Give Ranikhet (ND) killed vaccine (0.2 ml intra-muscularly) at 18-20 weeks.
			<ul style="list-style-type: none"> - Provide external heat source. As RH is likely to remain above 65%, check for damping in litter material. If found, replace it, as it may cause less production in layers and respiratory disease in chicks due to high Ammonia and reduced Oxygen content leading to growth retardation (environmentally induced nutritional stress). Also, it may lead to many diseases (viral, bacterial, fungal, protozoan).
	All susceptible age groups	De-worming	<ul style="list-style-type: none"> - De-worm with Piperazine Hexahydrate @ 20 ml/ 3.5 lit and repeat after 7 days.
	Chick upto 5 days		<ul style="list-style-type: none"> - Provide Furavet powder @ 1 g/ 2 lit of drinking water and Vimeral @ 5ml/ lit of water.



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MANIPUR BULLETIN
8th January, 2013

Thoubal

IAAS, ICAR-RC Manipur Centre in association with India Meteorological Department, Regional Meteorological Centre, Guwahati and Northern Hemisphere Analysis Centre, New Delhi, Ministry of Earth Science, Govt. of India reports the weather forecasts for the next five days, i.e., from 9th to 13th January, 2013 as given below:

<u>Significant past weather for the preceding bi-weekly of Imphal - West (4th to 7th January, 2013)</u>	<u>Weather forecast for next five days of Thoubal (9th to 13th January, 2013)</u>
<p>During the past four days the sky was mainly clear to partly cloudy but mainly cloudy during morning hours of 2nd Jan. No rainfall was recorded during past four days. Maximum temperature range observed was 18.0 – 23.4 °C, range of minimum temperature observed was 1.4 – 2.5 °C, mean relative humidity observed in morning and afternoon were 86.75 % and 40.0 % respectively. The average wind speed range was 1.5 – 2.5 km/hr.</p>	<p>There is likely of no rain during next five days. The sky is likely to clear to mainly clear. The maximum temp. is likely to be 18.0 - 22.0 °C. The minimum temp. is likely to be 2.0 - 4.0 °C. The maximum RH is likely to attain a max value of 76 %. Minimum RH is likely to reach a max of 50 %. The average wind speed during next five days may reach upto max. value of 4 km/hr.</p>

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
Field Crops			
Zero tillage Rapeseed	Vegetative		<ul style="list-style-type: none"> - Top dress and irrigate. - Thinning must be done where plant population is high.
Rabi Maize	Vegetative		<ul style="list-style-type: none"> - Irrigation may be done. - After earthing up, top dress with nitrogen fertilizer when the plant is knee high.
Storage			<ul style="list-style-type: none"> - Seeds of crops like rice, soybean, groundnut, etc. must be stored in RC-seed bins after proper drying. Check for germination of seeds. Clean and dry the seeds.
Horticulture Crops			
<ul style="list-style-type: none"> - As the weather is foggy during morning and evening, smoking (using straw/ husk of rice) may be done in and around those crop field in which the crop is in vegetative stage, specially for solanaceae crop. Irrigation may be done to keep soil moist. 			
Papaya	Nursery		<ul style="list-style-type: none"> Sowing may be done. Recommended varieties are- Coorg Honey, Ranchi Dwarf and Amit Sagar.
Citrus (Orange, Lemon, Lime)	Seed collection & nursery		<ul style="list-style-type: none"> - Collect healthy & mature fruits from disease free tree and raise nursery. - In grown-up trees, remove water sprouts, dried leaves and dead branches and paint the cut ends with Bordeaux paste.
Cucurbits	Nursery		<ul style="list-style-type: none"> Nurseries of gourd, sponge gourd, bitter gourd, pumpkin, etc. may be raised in polybags (2x3 inches) or pro-trays under polyhouse.
Dolichos bean	Fruiting	Aphid	<ul style="list-style-type: none"> - Watering to wash off the aphid is required as the crop is in fruiting stage.
Onion/ Garlic	Vegetative		<ul style="list-style-type: none"> - Light and frequent watering is required.
Potato	Vegetative		<ul style="list-style-type: none"> - For crop in vegetative stage (40-45 days) with 4-6 leaves stage, top dress with 25 kg DAP/ sangam followed earthing-up of ridges and light irrigation to keep the soil moist.
Pea	Vegetative to flowering		<ul style="list-style-type: none"> - Avoid nipping of young shoots at vegetative stage as it will delay fruiting and reduce the yield. Spray Bayleton @ 0.7g/ 10 lit of water if incidence of powdery mildew is observed.
Cole crops	Nursery and transplanting to vegetative Harvesting of broccoli		<ul style="list-style-type: none"> - Light and frequent watering is required. - Harvesting of Broccoli must be done when the head/ bud are compact, before it gets open. Maintain stalk length of 10-15 cm while harvesting.



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“Integrated Agromet Advisory Services”

Fisheries

Type of Farming	Agro-meteorological advisories
Carp culture	<ul style="list-style-type: none"> Renew half of the culture pond water with clean and fresh water regularly Depth of pond water should be maintained at 1.0 – 1.5 m. If there is problem in maintaining water level of large area then thinning of fish population may be done and culture pond area may be reduced. Also, maintain stock density @ 5000 fishes/ ha. Feed should be given @ 2 % of body weight per day. As a disinfectant, regularly apply CIFAX/ lime in culture pond in small quantity at an interval of 15-20 days.

Animal Sciences

* Use Butox @ 2 ml/lit of water and brush the animal / spray the solution once/ twice in a week against external parasites (Mites) in cattle/ buffalo/ Mithun, goat/ sheep and (Mange) in pig.

Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
Pig	Above 3 months of age	Internal parasite Swine Fever	<ul style="list-style-type: none"> - De-worm using Panacur @ 1 tab/10 kg body weight orally once only and repeat after one month. - Vaccinate against Swine Fever (animals of above 3 months of age).
	All susceptible age groups	Coccidiosis	<ul style="list-style-type: none"> - Advocate Metaprim @ 2g/ 10 kg body weight for 5-7 days, include electrolyte powder.
Cattle / Buffalo/ Mithun	All age groups except three months or below	FMD	<ul style="list-style-type: none"> - FMD vaccination maybe done at the first age of 4 months. It must be repeated after 6 months then annually.
		Internal parasite	<ul style="list-style-type: none"> Nilzan @ 0.33 ml/kg body weight once especially in lower altitudes.
Poultry	All susceptible age groups	Coccidiosis	<ul style="list-style-type: none"> Give Supercox@1g/lit of water for 4 – 5 days.
		Ranikhet	<ul style="list-style-type: none"> - Vaccinate with strain live vaccine @ one drop on eyes or nostril at 7th day. Give Lasota strain at 10-12 weeks. Give R2B vaccine at the age of 45-60 days @0.5 ml (intra-muscularly). Give Ranikhet (ND) killed vaccine (0.2 ml intra-muscularly) at 18-20 weeks.
			<ul style="list-style-type: none"> - Provide external heat source. As RH is likely to remain above 65%, check for damping in litter material. If found, replace it, as it may cause less production in layers and respiratory disease in chicks due to high Ammonia and reduced Oxygen content leading to growth retardation (environmentally induced nutritional stress). Also, it may lead to many diseases (viral, bacterial, fungal, protozoan).
	All susceptible age groups	De-worming	<ul style="list-style-type: none"> - De-worm with Piperazine Hexahydrate @ 20 ml/ 3.5 lit and repeat after 7 days.
	Chick upto 5 days		<ul style="list-style-type: none"> - Provide Furavet powder @ 1 g/ 2 lit of drinking water and Vimeral @ 5ml/ lit of water.



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



“Integrated Agromet Advisory Services”

MANIPUR BULLETIN
8th January, 2013

Ukhrul

IAAS, ICAR-RC Manipur Centre in association with India Meteorological Department, Regional Meteorological Centre, Guwahati and Northern Hemisphere Analysis Centre, New Delhi, Ministry of Earth Science, Govt. of India reports the weather forecasts for the next five days, i.e., from 9th to 13th January, 2013 as given below:

<u>Significant past weather for the preceding bi-weekly of Imphal - West (4th to 7th January, 2013)</u>	<u>Weather forecast for next five days of Ukhrul (9th to 13th January, 2013)</u>
<p>During the past four days the sky was mainly clear to partly cloudy but mainly cloudy during morning hours of 2nd Jan. No rainfall was recorded during past four days. Maximum temperature range observed was 18.0 – 23.4 °C, range of minimum temperature observed was 1.4 – 2.5 °C, mean relative humidity observed in morning and afternoon were 86.75 % and 40.0 % respectively. The average wind speed range was 1.5 – 2.5 km/hr.</p>	<p>There is likely of no rain during next five days. The sky is likely to clear to mainly clear. The maximum temp. is likely to be 15.0 - 20.0 °C. The minimum temp. is likely to be 0.0 - 3.0 °C. The maximum RH is likely to attain a max value of 77 %. Minimum RH is likely to reach a max of 59 %. The average wind speed during next five days may reach upto max. value of 8 km/hr.</p>

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
Field Crops			
Zero tillage Rapeseed	Vegetative		<ul style="list-style-type: none"> - Top dress and irrigate. - Thinning must be done where plant population is high.
Rabi Maize	Vegetative		<ul style="list-style-type: none"> - Irrigation may be done. - After earthing up, top dress with nitrogen fertilizer when the plant is knee high.
Storage			<ul style="list-style-type: none"> - Seeds of crops like rice, soybean, groundnut, etc. must be stored in RC-seed bins after proper drying. Check for germination of seeds. Clean and dry the seeds.
Horticulture Crops			
<ul style="list-style-type: none"> - As the weather is foggy during morning and evening, smoking (using straw/ husk of rice) may be done in and around those crop field in which the crop is in vegetative stage, specially for solanaceae crop. Irrigation may be done to keep soil moist. 			
Papaya	Nursery		<ul style="list-style-type: none"> Sowing may be done. Recommended varieties are- Coorg Honey, Ranchi Dwarf and Amit Sagar.
Citrus (Orange, Lemon, Lime)	Seed collection & nursery		<ul style="list-style-type: none"> - Collect healthy & mature fruits from disease free tree and raise nursery. - In grown-up trees, remove water sprouts, dried leaves and dead branches and paint the cut ends with Bordeaux paste.
Cucurbits	Nursery		<ul style="list-style-type: none"> Nurseries of gourd, sponge gourd, bitter gourd, pumpkin, etc. may be raised in polybags (2x3 inches) or pro-trays under polyhouse.
Dolichos bean	Fruiting	Aphid	<ul style="list-style-type: none"> - Watering to wash off the aphid is required as the crop is in fruiting stage.
Onion/ Garlic	Vegetative		<ul style="list-style-type: none"> - Light and frequent watering is required.
Potato	Vegetative		<ul style="list-style-type: none"> - For crop in vegetative stage (40-45 days) with 4-6 leaves stage, top dress with 25 kg DAP/ sangam followed earthing-up of ridges and light irrigation to keep the soil moist.
Pea	Vegetative to flowering		<ul style="list-style-type: none"> - Avoid nipping of young shoots at vegetative stage as it will delay fruiting and reduce the yield. Spray Bayleton @ 0.7g/ 10 lit of water if incidence of powdery mildew is observed.
Cole crops	Vegetative		<ul style="list-style-type: none"> - Light and frequent watering is required.



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Fisheries

Type of Farming	Agro-meteorological advisories
Carp culture	<ul style="list-style-type: none"> Renew half of the culture pond water with clean and fresh water regularly Depth of pond water should be maintained at 1.0 – 1.5 m. If there is problem in maintaining water level of large area then thinning of fish population may be done and culture pond area may be reduced. Also, maintain stock density @ 5000 fishes/ ha. Feed should be given @ 2 % of body weight per day. As a disinfectant, regularly apply CIFAX/ lime in culture pond in small quantity at an interval of 15-20 days.

Animal Sciences

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Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
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	All susceptible age groups	Coccidiosis	<ul style="list-style-type: none"> - Advocate Metaprim @ 2g/ 10 kg body weight for 5-7 days, include electrolyte powder.
Cattle / Buffalo/ Mithun	All age groups except three months or below	FMD	<ul style="list-style-type: none"> - FMD vaccination maybe done at the first age of 4 months. It must be repeated after 6 months then annually.
		Internal parasite	<ul style="list-style-type: none"> Nilzan @ 0.33 ml/kg body weight once especially in lower altitudes.
Poultry	All susceptible age groups	Coccidiosis	<ul style="list-style-type: none"> Give Supercox@1g/lit of water for 4 – 5 days.
		Ranikhet	<ul style="list-style-type: none"> - Vaccinate with strain live vaccine @ one drop on eyes or nostril at 7th day. Give Lasota strain at 10-12 weeks. Give R2B vaccine at the age of 45-60 days @0.5 ml (intra-muscularly). Give Ranikhet (ND) killed vaccine (0.2 ml intra-muscularly) at 18-20 weeks.
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