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EXPERIMENTAL AGROMET ADVISORY SERVICE

ICAR Research Complex for NEH Region

Manipur Centre, Lamphelpat

Imphal - 795 004

Station: Lamphelpat, Imphal

Month & Year: January, 2013

Latitude: 24⁰ 45' N

Longitude: 93⁰ 54' E

Date	Temperature (⁰ C)		Relative Humidity (%)		Wind Direction		Wind Speed
	Max.	Min.	07 00 hrs	13 00hrs	07 00 hrs	13 00hrs	km/hr
01-11-13	18.2	-0.5	80	29	290	260	1.8
01-12-13	21.4	0.3	81	38	35	275	1.6
01-13-13	19.7	0.5	85	38	300	240	1.7
01-14-13	21.6	2.5	80	34	135	210	1.2

Standard Week: 2 & 3

Altitude : 774m

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



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



“Integrated Agromet Advisory Services”

MANIPUR BULLETIN

15th 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 16th to 20th January, 2013 as given below:

<p><u>Significant past weather for the preceding bi-weekly of Imphal - West (11th to 14th January, 2013)</u></p> <p>During the past four days the sky was clear to mainly clear. No rainfall was recorded during past four days. Maximum temperature range observed was 18.2 – 21.6 °C, range of minimum temperature observed was -0.5 – 2.5 °C, mean relative humidity observed in morning and afternoon were 81.5 % and 34.75 % respectively. The average wind speed range was 1.2 – 1.8 km/hr.</p>	<p><u>Weather forecast for next five days of Bishnupur (16th to 20th January, 2013)</u></p> <p>There is likely of no rain during next five days. The sky is likely to be clear to mainly clear but cloudy on 19th Jan. The maximum temp. is likely to be 20.0 - 24.0 °C. The minimum temp. is likely to be 2.0 - 5.0 °C. The maximum RH is likely to attain a max value of 86 %. Minimum RH is likely to reach a max of 57 %. The average wind speed during next five days may reach upto max. value of 4 km/hr.</p>
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Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
Field Crops			
Zero tillage Rapeseed	Vegetative to flowering		- Irrigate the crop field to maintain the optimum soil moisture. - Thinning must be done where plant population is high.
Rabi Maize	Vegetative		- Weeding and irrigation may be done. - After earthing up, top dress with nitrogen fertilizer when the plant is knee high.
Field Pea	Vegetative		- Weeding and irrigation of the crop field may be done as there is likely of no rains in next five days. Check for infestation of pea aphids. If observed, spray Malathion 50EC @ 1 ml/l of water.
Storage			- 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			
- Irrigation may be done to keep soil moist.			
Cucurbits	Nursery		Presently, don't sow cucurbits in field as the temperature is low. But nurseries of gourd, sponge gourd, bitter gourd, pumpkin, etc. may be raised in polybags (2x3 inches) or pro-trays under polyhouse.
Tomato/ Chilli/ Brinjal	Transplanting		- Transplanting of tomato/ brinjal/ chilli may be done after few days.
Onion/ Garlic	Vegetative		- Light and frequent watering is required.
Potato	Vegetative		- 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.
French Bean	Sowing to early vegetative		- If the crop is in two to three leaves stage, cover them with paddy straw to protect it from frost.
Cole crops	Vegetative		- Light and frequent watering is required.



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



“Integrated Agromet Advisory Services”

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	Internalparasite Swine Fever	- 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	- 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	- FMD vaccination maybe done at the first age of 4 months. It must be repeated after 6 months then annually.
		Internal parasite	Nilzan @ 0.33 ml/kg body weight once especially in lower altitudes.
Poultry	All susceptible age groups	Coccidiosis	Give Supercox@1g/lit of water for 4 – 5 days.
		Ranikhet	- Vaccinate with strain live vaccine @ one drop on eyes or nostril. at 7th day. Give Lasota strain at 10-12 weeks. Give R ₂ B 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.
			- Provide external heat source. 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	- De-worm with Piperazine liquid @ 40 ml for 100 birds and repeat after 7 days. - Provide vitamin like Growmore@ 1ml/ lit of drinking water.
	Chick upto 5 days		- Provide Furavet powder @ 1 g/ 2 lit of drinking water and Vimeral @ 5ml/ lit of water.
Fisheries			
Type of Farming	Stage	Field	Agro-metrological advisories
Carp culture	Common carp & grass carp brooders	Pond and water	Water depth should be maintained at 1.5-2.0m Agri-lime should be apply in brooder ponds at small quantity at an interval of 20 days regularly.
		Feed	Feeds should be provided 1-2 times a day @ 2-3% body weight per day
		Fish	Male and female brooders should be stock in separate ponds Brooders of 2-3 years old having more than 1kg should be selected for seed production.
	Grow -out	Pond and water	Water depth should be maintained more than 1.0m. Regular liming should be done.
		Fish	Sampling of fish for growth, diseases (if any) should be done by regular netting. Partial harvesting of marketable size fishes are also recommended.
		Feed	Feed should be provided @ 1-2% body weight per day. Feed can be fed 2 times a day.
Paddy cum fish culture	water		Water depth of the field can be increase by pumping or draining if water is available to continue the culture. Harvesting of fish also can be done in areas where water availability is low.



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



“Integrated Agromet Advisory Services”

MANIPUR BULLETIN

15th 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 16th to 20th January, 2013 as given below:

<p><u>Significant past weather for the preceding bi-weekly of Imphal - West (11th to 14th January, 2013)</u></p> <p>During the past four days the sky was clear to mainly clear. No rainfall was recorded during past four days. Maximum temperature range observed was 18.2 – 21.6 °C, range of minimum temperature observed was -0.5 – 2.5 °C, mean relative humidity observed in morning and afternoon were 81.5 % and 34.75 % respectively. The average wind speed range was 1.2 – 1.8 km/hr.</p>	<p><u>Weather forecast for next five days of Chandel (16th to 20th January, 2013)</u></p> <p>There is likely of no rain during next five days. The sky is likely to be clear to mainly clear but partly cloudy to cloudy on 18th & 19th Jan. The maximum temp. is likely to be 21.0 - 25.0 °C. The minimum temp. is likely to be 3.0 - 6.0 °C. The maximum RH is likely to attain a max value of 83 %. Minimum RH is likely to reach a max of 59 %. The average wind speed during next five days may reach upto max. value of 5 km/hr.</p>
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Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
Field Crops			
Zero tillage Rapeseed	Vegetative to flowering		- Irrigate the crop field to maintain the optimum soil moisture. - Thinning must be done where plant population is high.
Rabi Maize	Vegetative		- Weeding and irrigation may be done. - After earthing up, top dress with nitrogen fertilizer when the plant is knee high.
Field Pea	Vegetative		- Weeding and irrigation of the crop field may be done as there is likely of no rains in next five days. Check for infestation of pea aphids. If observed, spray Malathion 50EC @ 1 ml/l of water.
Storage			- 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			
- Irrigation may be done to keep soil moist.			
Cucurbits	Nursery		Presently, don't sow cucurbits in field as the temperature is low. But nurseries of gourd, sponge gourd, bitter gourd, pumpkin, etc. may be raised in polybags (2x3 inches) or pro-trays under polyhouse.
Tomato/ Chilli/ Brinjal	Transplanting		- Transplanting of tomato/ brinjal/ chilli may be done after few days.
Onion/ Garlic	Vegetative		- Light and frequent watering is required.
Potato	Vegetative		- 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.
French Bean	Sowing to early vegetative		- If the crop is in two to three leaves stage, cover them with paddy straw to protect it from frost.
Cole crops	Vegetative		- Light and frequent watering is required.



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“Integrated Agromet Advisory Services”

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	Internalparasite Swine Fever	- 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	- 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	- FMD vaccination maybe done at the first age of 4 months. It must be repeated after 6 months then annually.
		Internal parasite	Nilzan @ 0.33 ml/kg body weight once especially in lower altitudes.
Poultry	All susceptible age groups	Coccidiosis	Give Supercox@1g/lit of water for 4 – 5 days.
		Ranikhet	- Vaccinate with strain live vaccine @ one drop on eyes or nostril. at 7th day. Give Lasota strain at 10-12 weeks. Give R ₂ B 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.
			- Provide external heat source. 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	- De-worm with Piperazine liquid @ 40 ml for 100 birds and repeat after 7 days. - Provide vitamin like Growmore@ 1ml/ lit of drinking water.
	Chick upto 5 days		- Provide Furavet powder @ 1 g/ 2 lit of drinking water and Vimeral @ 5ml/ lit of water.
Fisheries			
Type of Farming	Stage	Field	Agro-metrological advisories
Carp culture	Common carp & grass carp brooders	Pond and water	Water depth should be maintained at 1.5-2.0m Agri-lime should be apply in brooder ponds at small quantity at an interval of 20 days regularly.
		Feed	Feeds should be provided 1-2 times a day @ 2-3% body weight per day
		Fish	Male and female brooders should be stock in separate ponds Brooders of 2-3 years old having more than 1kg should be selected for seed production.
	Grow -out	Pond and water	Water depth should be maintained more than 1.0m. Regular liming should be done.
		Fish	Sampling of fish for growth, diseases (if any) should be done by regular netting. Partial harvesting of marketable size fishes are also recommended.
		Feed	Feed should be provided @ 1-2% body weight per day. Feed can be fed 2 times a day.
Paddy cum fish culture	water		Water depth of the field can be increase by pumping or draining if water is available to continue the culture. Harvesting of fish also can be done in areas where water availability is low.



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“Integrated Agromet Advisory Services”

MANIPUR BULLETIN

15th 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 16th to 20th January, 2013 as given below:

<p><u>Significant past weather for the preceding bi-weekly of Imphal - West (11th to 14th January, 2013)</u></p> <p>During the past four days the sky was clear to mainly clear. No rainfall was recorded during past four days. Maximum temperature range observed was 18.2 – 21.6 °C, range of minimum temperature observed was -0.5 – 2.5 °C, mean relative humidity observed in morning and afternoon were 81.5 % and 34.75 % respectively. The average wind speed range was 1.2 – 1.8 km/hr.</p>	<p><u>Weather forecast for next five days of Churachandpur (16th to 20th January, 2013)</u></p> <p>There is likely of no rain during next five days. The sky is likely to be clear to mainly clear but cloudy on 19th Jan. 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 93 %. Minimum RH is likely to reach a max of 67 %. The average wind speed during next five days may reach upto max. value of 6 km/hr.</p>
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Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
Field Crops			
Zero tillage Rapeseed	Vegetative to flowering		- Irrigate the crop field to maintain the optimum soil moisture. - Thinning must be done where plant population is high.
Rabi Maize	Vegetative		- Weeding and irrigation may be done. - After earthing up, top dress with nitrogen fertilizer when the plant is knee high.
Field Pea	Vegetative		- Weeding and irrigation of the crop field may be done as there is likely of no rains in next five days. Check for infestation of pea aphids. If observed, spray Malathion 50EC @ 1 ml/l of water.
Storage			- 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			
- Irrigation may be done to keep soil moist.			
Cucurbits	Nursery		Presently, don't sow cucurbits in field as the temperature is low. But nurseries of gourd, sponge gourd, bitter gourd, pumpkin, etc. may be raised in polybags (2x3 inches) or pro-trays under polyhouse.
Tomato/ Chilli/ Brinjal	Transplanting		- Transplanting of tomato/ brinjal/ chilli may be done after few days.
Onion/ Garlic	Vegetative		- Light and frequent watering is required.
Potato	Vegetative		- 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.
French Bean	Sowing to early vegetative		- If the crop is in two to three leaves stage, cover them with paddy straw to protect it from frost.
Cole crops	Vegetative		- Light and frequent watering is required.



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



“Integrated Agromet Advisory Services”

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	Internalparasite Swine Fever	- 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	- 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	- FMD vaccination maybe done at the first age of 4 months. It must be repeated after 6 months then annually.
		Internal parasite	Nilzan @ 0.33 ml/kg body weight once especially in lower altitudes.
Poultry	All susceptible age groups	Coccidiosis	Give Supercox@1g/lit of water for 4 – 5 days.
		Ranikhet	- Vaccinate with strain live vaccine @ one drop on eyes or nostril. at 7th day. Give Lasota strain at 10-12 weeks. Give R ₂ B 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.
			- Provide external heat source. 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	- De-worm with Piperazine liquid @ 40 ml for 100 birds and repeat after 7 days. - Provide vitamin like Growmore@ 1ml/ lit of drinking water.
	Chick upto 5 days		- Provide Furavet powder @ 1 g/ 2 lit of drinking water and Vimeral @ 5ml/ lit of water.
Fisheries			
Type of Farming	Stage	Field	Agro-metrological advisories
Carp culture	Common carp & grass carp brooders	Pond and water	Water depth should be maintained at 1.5-2.0m Agri-lime should be apply in brooder ponds at small quantity at an interval of 20 days regularly.
		Feed	Feeds should be provided 1-2 times a day @ 2-3% body weight per day
		Fish	Male and female brooders should be stock in separate ponds Brooders of 2-3 years old having more than 1kg should be selected for seed production.
	Grow -out	Pond and water	Water depth should be maintained more than 1.0m. Regular liming should be done.
		Fish	Sampling of fish for growth, diseases (if any) should be done by regular netting. Partial harvesting of marketable size fishes are also recommended.
		Feed	Feed should be provided @ 1-2% body weight per day. Feed can be fed 2 times a day.
Paddy cum fish culture	water		Water depth of the field can be increase by pumping or draining if water is available to continue the culture. Harvesting of fish also can be done in areas where water availability is low.



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



“Integrated Agromet Advisory Services”

MANIPUR BULLETIN

15th 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 16th to 20th January, 2013 as given below:

<p><u>Significant past weather for the preceding bi-weekly of Imphal - West (11th to 14th January, 2013)</u></p> <p>During the past four days the sky was clear to mainly clear. No rainfall was recorded during past four days. Maximum temperature range observed was 18.2 – 21.6 °C, range of minimum temperature observed was -0.5 – 2.5 °C, mean relative humidity observed in morning and afternoon were 81.5 % and 34.75 % respectively. The average wind speed range was 1.2 – 1.8 km/hr.</p>	<p><u>Weather forecast for next five days of Imphal- East (16th to 20th January, 2013)</u></p> <p>There is likely of no rain during next five days. The sky is likely to be clear to mainly clear but cloudy on 19th Jan. The maximum temp. is likely to be 19.0 - 23.0 °C. The minimum temp. is likely to be 2.0 - 4.0 °C. The maximum RH is likely to attain a max value of 89 %. Minimum RH is likely to reach a max of 51 %. The average wind speed during next five days may reach upto max. value of 3 km/hr.</p>
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Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
Field Crops			
Zero tillage Rapeseed	Vegetative to flowering		- Irrigate the crop field to maintain the optimum soil moisture. - Thinning must be done where plant population is high.
Rabi Maize	Vegetative		- Weeding and irrigation may be done. - After earthing up, top dress with nitrogen fertilizer when the plant is knee high.
Field Pea	Vegetative		- Weeding and irrigation of the crop field may be done as there is likely of no rains in next five days. Check for infestation of pea aphids. If observed, spray Malathion 50EC @ 1 ml/l of water.
Storage			- 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			
- Irrigation may be done to keep soil moist.			
Cucurbits	Nursery		Presently, don't sow cucurbits in field as the temperature is low. But nurseries of gourd, sponge gourd, bitter gourd, pumpkin, etc. may be raised in polybags (2x3 inches) or pro-trays under polyhouse.
Tomato/ Chilli/ Brinjal	Transplanting		- Transplanting of tomato/ brinjal/ chilli may be done after few days.
Onion/ Garlic	Vegetative		- Light and frequent watering is required.
Potato	Vegetative		- 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.
French Bean	Sowing to early vegetative		- If the crop is in two to three leaves stage, cover them with paddy straw to protect it from frost.
Cole crops	Vegetative		- Light and frequent watering is required.



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



“Integrated Agromet Advisory Services”

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	Internalparasite Swine Fever	- 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	- 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	- FMD vaccination maybe done at the first age of 4 months. It must be repeated after 6 months then annually.
		Internal parasite	Nilzan @ 0.33 ml/kg body weight once especially in lower altitudes.
Poultry	All susceptible age groups	Coccidiosis	Give Supercox@1g/lit of water for 4 – 5 days.
		Ranikhet	- Vaccinate with strain live vaccine @ one drop on eyes or nostril. at 7th day. Give Lasota strain at 10-12 weeks. Give R ₂ B 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.
			- Provide external heat source. 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	- De-worm with Piperazine liquid @ 40 ml for 100 birds and repeat after 7 days. - Provide vitamin like Growmore@ 1ml/ lit of drinking water.
	Chick upto 5 days		- Provide Furavet powder @ 1 g/ 2 lit of drinking water and Vimeral @ 5ml/ lit of water.
Fisheries			
Type of Farming	Stage	Field	Agro-metrological advisories
Carp culture	Common carp & grass carp brooders	Pond and water	Water depth should be maintained at 1.5-2.0m Agri-lime should be apply in brooder ponds at small quantity at an interval of 20 days regularly.
		Feed	Feeds should be provided 1-2 times a day @ 2-3% body weight per day
		Fish	Male and female brooders should be stock in separate ponds Brooders of 2-3 years old having more than 1kg should be selected for seed production.
	Grow -out	Pond and water	Water depth should be maintained more than 1.0m. Regular liming should be done.
		Fish	Sampling of fish for growth, diseases (if any) should be done by regular netting. Partial harvesting of marketable size fishes are also recommended.
		Feed	Feed should be provided @ 1-2% body weight per day. Feed can be fed 2 times a day.
Paddy cum fish culture	water		Water depth of the field can be increase by pumping or draining if water is available to continue the culture. Harvesting of fish also can be done in areas where water availability is low.



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Manipur Centre, Lamphelpat, Imphal - 795 004**



“Integrated Agromet Advisory Services”

MANIPUR BULLETIN

15th 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 16th to 20th January, 2013 as given below:

<p><u>Significant past weather for the preceding bi-weekly of Imphal - West (11th to 14th January, 2013)</u></p> <p>During the past four days the sky was clear to mainly clear. No rainfall was recorded during past four days. Maximum temperature range observed was 18.2 – 21.6 °C, range of minimum temperature observed was -0.5 – 2.5 °C, mean relative humidity observed in morning and afternoon were 81.5 % and 34.75 % respectively. The average wind speed range was 1.2 – 1.8 km/hr.</p>	<p><u>Weather forecast for next five days of Imphal- West (16th to 20th January, 2013)</u></p> <p>There is likely of no rain during next five days. The sky is likely to be clear to mainly clear but cloudy on 19th Jan. The maximum temp. is likely to be 19.0 - 23.0 °C. The minimum temp. is likely to be 2.0 - 4.0 °C. The maximum RH is likely to attain a max value of 80 %. Minimum RH is likely to reach a max of 64 %. The average wind speed during next five days may reach upto max. value of 6 km/hr.</p>
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Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
Field Crops			
Zero tillage Rapeseed	Vegetative to flowering		- Irrigate the crop field to maintain the optimum soil moisture. - Thinning must be done where plant population is high.
Rabi Maize	Vegetative		- Weeding and irrigation may be done. - After earthing up, top dress with nitrogen fertilizer when the plant is knee high.
Field Pea	Vegetative		- Weeding and irrigation of the crop field may be done as there is likely of no rains in next five days. Check for infestation of pea aphids. If observed, spray Malathion 50EC @ 1 ml/l of water.
Storage			- 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			
- Irrigation may be done to keep soil moist.			
Cucurbits	Nursery		Presently, don't sow cucurbits in field as the temperature is low. But nurseries of gourd, sponge gourd, bitter gourd, pumpkin, etc. may be raised in polybags (2x3 inches) or pro-trays under polyhouse.
Tomato/ Chilli/ Brinjal	Transplanting		- Transplanting of tomato/ brinjal/ chilli may be done after few days.
Onion/ Garlic	Vegetative		- Light and frequent watering is required.
Potato	Vegetative		- 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.
French Bean	Sowing to early vegetative		- If the crop is in two to three leaves stage, cover them with paddy straw to protect it from frost.
Cole crops	Vegetative		- Light and frequent watering is required.



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



“Integrated Agromet Advisory Services”

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	Internalparasite Swine Fever	- 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	- 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	- FMD vaccination maybe done at the first age of 4 months. It must be repeated after 6 months then annually.
		Internal parasite	Nilzan @ 0.33 ml/kg body weight once especially in lower altitudes.
Poultry	All susceptible age groups	Coccidiosis	Give Supercox@1g/lit of water for 4 – 5 days.
		Ranikhet	- Vaccinate with strain live vaccine @ one drop on eyes or nostril. at 7th day. Give Lasota strain at 10-12 weeks. Give R ₂ B 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.
			- Provide external heat source. 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	- De-worm with Piperazine liquid @ 40 ml for 100 birds and repeat after 7 days. - Provide vitamin like Growmore@ 1ml/ lit of drinking water.
	Chick upto 5 days		- Provide Furavet powder @ 1 g/ 2 lit of drinking water and Vimeral @ 5ml/ lit of water.
Fisheries			
Type of Farming	Stage	Field	Agro-metrological advisories
Carp culture	Common carp & grass carp brooders	Pond and water	Water depth should be maintained at 1.5-2.0m Agri-lime should be apply in brooder ponds at small quantity at an interval of 20 days regularly.
		Feed	Feeds should be provided 1-2 times a day @ 2-3% body weight per day
		Fish	Male and female brooders should be stock in separate ponds Brooders of 2-3 years old having more than 1kg should be selected for seed production.
	Grow -out	Pond and water	Water depth should be maintained more than 1.0m. Regular liming should be done.
		Fish	Sampling of fish for growth, diseases (if any) should be done by regular netting. Partial harvesting of marketable size fishes are also recommended.
		Feed	Feed should be provided @ 1-2% body weight per day. Feed can be fed 2 times a day.
Paddy cum fish culture	water		Water depth of the field can be increase by pumping or draining if water is available to continue the culture. Harvesting of fish also can be done in areas where water availability is low.



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MANIPUR BULLETIN

15th 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 16th to 20th January, 2013 as given below:

<p><u>Significant past weather for the preceding bi-weekly of Imphal - West (11th to 14th January, 2013)</u></p> <p>During the past four days the sky was clear to mainly clear. No rainfall was recorded during past four days. Maximum temperature range observed was 18.2 – 21.6 °C, range of minimum temperature observed was -0.5 – 2.5 °C, mean relative humidity observed in morning and afternoon were 81.5 % and 34.75 % respectively. The average wind speed range was 1.2 – 1.8 km/hr.</p>	<p><u>Weather forecast for next five days of Senapati (16th to 20th January, 2013)</u></p> <p>There is likely of no rain during next five days. The sky is likely to be clear to mainly clear but mainly cloudy on 19th Jan. 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 93 %. Minimum RH is likely to reach a max of 67 %. The average wind speed during next five days may reach upto max. value of 6 km/hr.</p>
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Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
Field Crops			
Zero tillage Rapeseed	Vegetative to flowering		- Irrigate the crop field to maintain the optimum soil moisture. - Thinning must be done where plant population is high.
Rabi Maize	Vegetative		- Weeding and irrigation may be done. - After earthing up, top dress with nitrogen fertilizer when the plant is knee high.
Field Pea	Vegetative		- Weeding and irrigation of the crop field may be done as there is likely of no rains in next five days. Check for infestation of pea aphids. If observed, spray Malathion 50EC @ 1 ml/l of water.
Storage			- 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			
- Irrigation may be done to keep soil moist.			
Cucurbits	Nursery		Presently, don't sow cucurbits in field as the temperature is low. But nurseries of gourd, sponge gourd, bitter gourd, pumpkin, etc. may be raised in polybags (2x3 inches) or pro-trays under polyhouse.
Chilli/ Brinjal	Transplanting		- Transplanting of brinjal/ chilli may be done after few days.
Onion/ Garlic	Vegetative		- Light and frequent watering is required.
Potato	Vegetative		- 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.
French Bean	Sowing to early vegetative		- If the crop is in two to three leaves stage, cover them with paddy straw to protect it from frost.
Cole crops	Vegetative		- Light and frequent watering is required.



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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	Internalparasite Swine Fever	- 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	- 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	- FMD vaccination maybe done at the first age of 4 months. It must be repeated after 6 months then annually.
		Internal parasite	Nilzan @ 0.33 ml/kg body weight once especially in lower altitudes.
Poultry	All susceptible age groups	Coccidiosis	Give Supercox@1g/lit of water for 4 – 5 days.
		Ranikhet	- Vaccinate with strain live vaccine @ one drop on eyes or nostril. at 7th day. Give Lasota strain at 10-12 weeks. Give R ₂ B 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.
			- Provide external heat source. 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	- De-worm with Piperazine liquid @ 40 ml for 100 birds and repeat after 7 days. - Provide vitamin like Growmore@ 1ml/ lit of drinking water.
	Chick upto 5 days		- Provide Furavet powder @ 1 g/ 2 lit of drinking water and Vimeral @ 5ml/ lit of water.
Fisheries			
Type of Farming	Stage	Field	Agro-metrological advisories
Carp culture	Common carp & grass carp brooders	Pond and water	Water depth should be maintained at 1.5-2.0m Agri-lime should be apply in brooder ponds at small quantity at an interval of 20 days regularly.
		Feed	Feeds should be provided 1-2 times a day @ 2-3% body weight per day
		Fish	Male and female brooders should be stock in separate ponds Brooders of 2-3 years old having more than 1kg should be selected for seed production.
	Grow -out	Pond and water	Water depth should be maintained more than 1.0m. Regular liming should be done.
		Fish	Sampling of fish for growth, diseases (if any) should be done by regular netting. Partial harvesting of marketable size fishes are also recommended.
		Feed	Feed should be provided @ 1-2% body weight per day. Feed can be fed 2 times a day.
Paddy cum fish culture	water		Water depth of the field can be increase by pumping or draining if water is available to continue the culture. Harvesting of fish also can be done in areas where water availability is low.



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MANIPUR BULLETIN

15th 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 16th to 20th January, 2013 as given below:

<u>Significant past weather for the preceding bi-weekly of Imphal - West (11th to 14th January, 2013)</u>	<u>Weather forecast for next five days of Tamenglong (16th to 20th January, 2013)</u>
During the past four days the sky was clear to mainly clear. No rainfall was recorded during past four days. Maximum temperature range observed was 18.2 – 21.6 °C, range of minimum temperature observed was -0.5 – 2.5 °C, mean relative humidity observed in morning and afternoon were 81.5 % and 34.75 % respectively. The average wind speed range was 1.2 – 1.8 km/hr.	There is likely of no rain during next five days. The sky is likely to be clear to mainly clear but cloudy on 19 th Jan. The maximum temp. is likely to be 23.0 °C. The minimum temp. is likely to be 3.0 - 5.0 °C. The maximum RH is likely to attain a max value of 85 %. Minimum RH is likely to reach a max of 59 %. The average wind speed during next five days may reach upto max. value of 5 km/hr.

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
Field Crops			
Zero tillage Rapeseed	Vegetative to flowering		- Irrigate the crop field to maintain the optimum soil moisture. - Thinning must be done where plant population is high.
Rabi Maize	Vegetative		- Weeding and irrigation may be done. - After earthing up, top dress with nitrogen fertilizer when the plant is knee high.
Field Pea	Vegetative		- Weeding and irrigation of the crop field may be done as there is likely of no rains in next five days. Check for infestation of pea aphids. If observed, spray Malathion 50EC @ 1 ml/l of water.
Storage			- 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			
- Irrigation may be done to keep soil moist.			
Cucurbits	Nursery		Presently, don't sow cucurbits in field as the temperature is low. But nurseries of gourd, sponge gourd, bitter gourd, pumpkin, etc. may be raised in polybags (2x3 inches) or pro-trays under polyhouse.
Tomato/ Chilli/ Brinjal	Transplanting		- Transplanting of tomato/ brinjal/ chilli may be done after few days.
Onion/ Garlic	Vegetative		- Light and frequent watering is required.
Potato	Vegetative		- 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.
French Bean	Sowing to early vegetative		- If the crop is in two to three leaves stage, cover them with paddy straw to protect it from frost.
Cole crops	Vegetative		- Light and frequent watering is required.



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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	Internalparasite Swine Fever	- 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	- 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	- FMD vaccination maybe done at the first age of 4 months. It must be repeated after 6 months then annually.
		Internal parasite	Nilzan @ 0.33 ml/kg body weight once especially in lower altitudes.
Poultry	All susceptible age groups	Coccidiosis	Give Supercox@1g/lit of water for 4 – 5 days.
		Ranikhet	- Vaccinate with strain live vaccine @ one drop on eyes or nostril. at 7th day. Give Lasota strain at 10-12 weeks. Give R ₂ B 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.
			- Provide external heat source. 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	- De-worm with Piperazine liquid @ 40 ml for 100 birds and repeat after 7 days. - Provide vitamin like Growmore@ 1ml/ lit of drinking water.
	Chick upto 5 days		- Provide Furavet powder @ 1 g/ 2 lit of drinking water and Vimeral @ 5ml/ lit of water.
Fisheries			
Type of Farming	Stage	Field	Agro-metrological advisories
Carp culture	Common carp & grass carp brooders	Pond and water	Water depth should be maintained at 1.5-2.0m Agri-lime should be apply in brooder ponds at small quantity at an interval of 20 days regularly.
		Feed	Feeds should be provided 1-2 times a day @ 2-3% body weight per day
		Fish	Male and female brooders should be stock in separate ponds Brooders of 2-3 years old having more than 1kg should be selected for seed production.
	Grow -out	Pond and water	Water depth should be maintained more than 1.0m. Regular liming should be done.
		Fish	Sampling of fish for growth, diseases (if any) should be done by regular netting. Partial harvesting of marketable size fishes are also recommended.
		Feed	Feed should be provided @ 1-2% body weight per day. Feed can be fed 2 times a day.
Paddy cum fish culture	water		Water depth of the field can be increase by pumping or draining if water is available to continue the culture. Harvesting of fish also can be done in areas where water availability is low.



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MANIPUR BULLETIN

15th 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 16th to 20th January, 2013 as given below:

<p><u>Significant past weather for the preceding bi-weekly of Imphal - West (11th to 14th January, 2013)</u></p> <p>During the past four days the sky was clear to mainly clear. No rainfall was recorded during past four days. Maximum temperature range observed was 18.2 – 21.6 °C, range of minimum temperature observed was -0.5 – 2.5 °C, mean relative humidity observed in morning and afternoon were 81.5 % and 34.75 % respectively. The average wind speed range was 1.2 – 1.8 km/hr.</p>	<p><u>Weather forecast for next five days of Thoubal (16th to 20th January, 2013)</u></p> <p>There is likely of no rain during next five days. The sky is likely to be clear to mainly clear but cloudy on 19th Jan. The maximum temp. is likely to be 20.0 - 24.0 °C. The minimum temp. is likely to be 2.0 - 5.0 °C. The maximum RH is likely to attain a max value of 86 %. Minimum RH is likely to reach a max of 58 %. The average wind speed during next five days may reach upto max. value of 4 km/hr.</p>
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Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
Field Crops			
Zero tillage Rapeseed	Vegetative to flowering		- Irrigate the crop field to maintain the optimum soil moisture. - Thinning must be done where plant population is high.
Rabi Maize	Vegetative		- Weeding and irrigation may be done. - After earthing up, top dress with nitrogen fertilizer when the plant is knee high.
Field Pea	Vegetative		- Weeding and irrigation of the crop field may be done as there is likely of no rains in next five days. Check for infestation of pea aphids. If observed, spray Malathion 50EC @ 1 ml/l of water.
Storage			- 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			
- Irrigation may be done to keep soil moist.			
Cucurbits	Nursery		Presently, don't sow cucurbits in field as the temperature is low. But nurseries of gourd, sponge gourd, bitter gourd, pumpkin, etc. may be raised in polybags (2x3 inches) or pro-trays under polyhouse.
Tomato/ Chilli/ Brinjal	Transplanting		- Transplanting of tomato/ brinjal/ chilli may be done after few days.
Onion/ Garlic	Vegetative		- Light and frequent watering is required.
Potato	Vegetative		- 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.
French Bean	Sowing to early vegetative		- If the crop is in two to three leaves stage, cover them with paddy straw to protect it from frost.
Cole crops	Vegetative		- Light and frequent watering is required.



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Manipur Centre, Lamphelpat, Imphal - 795 004



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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	Internalparasite Swine Fever	- 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	- 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	- FMD vaccination maybe done at the first age of 4 months. It must be repeated after 6 months then annually.
		Internal parasite	Nilzan @ 0.33 ml/kg body weight once especially in lower altitudes.
Poultry	All susceptible age groups	Coccidiosis	Give Supercox@1g/lit of water for 4 – 5 days.
		Ranikhet	- Vaccinate with strain live vaccine @ one drop on eyes or nostril. at 7th day. Give Lasota strain at 10-12 weeks. Give R ₂ B 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.
			- Provide external heat source. 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	- De-worm with Piperazine liquid @ 40 ml for 100 birds and repeat after 7 days. - Provide vitamin like Growmore@ 1ml/ lit of drinking water.
	Chick upto 5 days		- Provide Furavet powder @ 1 g/ 2 lit of drinking water and Vimeral @ 5ml/ lit of water.
Fisheries			
Type of Farming	Stage	Field	Agro-metrological advisories
Carp culture	Common carp & grass carp brooders	Pond and water	Water depth should be maintained at 1.5-2.0m Agri-lime should be apply in brooder ponds at small quantity at an interval of 20 days regularly.
		Feed	Feeds should be provided 1-2 times a day @ 2-3% body weight per day
		Fish	Male and female brooders should be stock in separate ponds Brooders of 2-3 years old having more than 1kg should be selected for seed production.
	Grow -out	Pond and water	Water depth should be maintained more than 1.0m. Regular liming should be done.
		Fish	Sampling of fish for growth, diseases (if any) should be done by regular netting. Partial harvesting of marketable size fishes are also recommended.
		Feed	Feed should be provided @ 1-2% body weight per day. Feed can be fed 2 times a day.
Paddy cum fish culture	water		Water depth of the field can be increase by pumping or draining if water is available to continue the culture. Harvesting of fish also can be done in areas where water availability is low.



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“Integrated Agromet Advisory Services”

MANIPUR BULLETIN

15th 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 16th to 20th January, 2013 as given below:

<p><u>Significant past weather for the preceding bi-weekly of Imphal - West (11th to 14th January, 2013)</u></p> <p>During the past four days the sky was clear to mainly clear. No rainfall was recorded during past four days. Maximum temperature range observed was 18.2 – 21.6 °C, range of minimum temperature observed was -0.5 – 2.5 °C, mean relative humidity observed in morning and afternoon were 81.5 % and 34.75 % respectively. The average wind speed range was 1.2 – 1.8 km/hr.</p>	<p><u>Weather forecast for next five days of Ukhrul (16th to 20th January, 2013)</u></p> <p>There is likely of no rain during next five days. The sky is likely to be clear to mainly clear but cloudy on 19th Jan. The maximum temp. is likely to be 17.0 - 21.0 °C. The minimum temp. is likely to be 1.0 - 3.0 °C. The maximum RH is likely to attain a max value of 84 %. Minimum RH is likely to reach a max of 62 %. The average wind speed during next five days may reach upto max. value of 7 km/hr.</p>
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Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
Field Crops			
Zero tillage Rapeseed	Vegetative to flowering		- Irrigate the crop field to maintain the optimum soil moisture. - Thinning must be done where plant population is high.
Rabi Maize	Vegetative		- Weeding and irrigation may be done. - After earthing up, top dress with nitrogen fertilizer when the plant is knee high.
Field Pea	Vegetative		- Weeding and irrigation of the crop field may be done as there is likely of no rains in next five days. Check for infestation of pea aphids. If observed, spray Malathion 50EC @ 1 ml/l of water.
Storage			- 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			
- Irrigation may be done to keep soil moist.			
Cucurbits	Nursery		Presently, don't sow cucurbits in field as the temperature is low. But nurseries of gourd, sponge gourd, bitter gourd, pumpkin, etc. may be raised in polybags (2x3 inches) or pro-trays under polyhouse.
Chilli/ Brinjal	Transplanting		- Transplanting of brinjal/ chilli may be done after few days.
Onion/ Garlic	Vegetative		- Light and frequent watering is required.
Potato	Vegetative		- 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.
French Bean	Sowing to early vegetative		- If the crop is in two to three leaves stage, cover them with paddy straw to protect it from frost.
Cole crops	Vegetative		- Light and frequent watering is required.



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



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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	Internalparasite Swine Fever	- 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	- 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	- FMD vaccination maybe done at the first age of 4 months. It must be repeated after 6 months then annually.
		Internal parasite	Nilzan @ 0.33 ml/kg body weight once especially in lower altitudes.
Poultry	All susceptible age groups	Coccidiosis	Give Supercox@1g/lit of water for 4 – 5 days.
		Ranikhet	- Vaccinate with strain live vaccine @ one drop on eyes or nostril. at 7th day. Give Lasota strain at 10-12 weeks. Give R ₂ B 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.
			- Provide external heat source. 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	- De-worm with Piperazine liquid @ 40 ml for 100 birds and repeat after 7 days. - Provide vitamin like Growmore@ 1ml/ lit of drinking water.
	Chick upto 5 days		- Provide Furavet powder @ 1 g/ 2 lit of drinking water and Vimeral @ 5ml/ lit of water.
Fisheries			
Type of Farming	Stage	Field	Agro-metrological advisories
Carp culture	Common carp & grass carp brooders	Pond and water	Water depth should be maintained at 1.5-2.0m Agri-lime should be apply in brooder ponds at small quantity at an interval of 20 days regularly.
		Feed	Feeds should be provided 1-2 times a day @ 2-3% body weight per day
		Fish	Male and female brooders should be stock in separate ponds Brooders of 2-3 years old having more than 1kg should be selected for seed production.
	Grow -out	Pond and water	Water depth should be maintained more than 1.0m. Regular liming should be done.
		Fish	Sampling of fish for growth, diseases (if any) should be done by regular netting. Partial harvesting of marketable size fishes are also recommended.
		Feed	Feed should be provided @ 1-2% body weight per day. Feed can be fed 2 times a day.
Paddy cum fish culture	water		Water depth of the field can be increase by pumping or draining if water is available to continue the culture. Harvesting of fish also can be done in areas where water availability is low.