

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



#### "Integrated Agromet Advisory Services"

# MANIPUR BULLETIN 26<sup>th</sup> November, 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 27<sup>th</sup> November to 1<sup>st</sup> December, 2013 as given below:

Significant past weather for the preceding bi-weekly of Imphal - West (22<sup>nd</sup> to 25<sup>th</sup> November, 2013)

During the past four days the sky was clear to partly cloudy but mainly cloudy during morning of  $22^{\rm nd}$  & afternoon of  $24^{\rm th}$  Nov. Also morning hours were foggy on  $25^{\rm th}$  Nov. **No** rainfall was recorded during past four days. Maximum temperature range observed was 26.6-27.4 °C, range of minimum temperature observed was 7.2-8.9 °C, mean relative humidity observed in morning and afternoon were 84.75 % and 51.25 % respectively. The average wind speed range was 1.1-1.9 km/hr.

Weather forecast for next five days of Churachandpur (27<sup>th</sup> November to 1<sup>st</sup> December, 2013)

There may be light rain on Friday & Saturday. Sky may be clear to partly cloudy on  $27^{th}$  Nov &  $1^{st}$  Dec and mainly cloudy during  $28^{th}$  to  $30^{th}$  Nov with maximum temp. of 25.0 - 26.0 °C & minimum temp. 6.0 - 11.0 °C. Relative Humidity may reach a maximum value of 100 % (maximum RH) & 60 % (minimum RH). The average wind speed may be 2-4 km/hr during next five days.

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
Field Crops	<u>'</u>		
Rice	Post-harvest		<ul> <li>Threshing and drying of grains may be completed before rains which is may occur from Friday.</li> <li>After proper threshing, grains must be sundried well before storage. Dry grains/ seeds to 12-14% moisture if mechanical thresher is used.</li> </ul>
Rapeseed/ Mustard	Sowing to early vegetative		<ul> <li>After harvesting rice, zero tillage rapeseed may be sown (seed rate is 10-12 kg/ha) when soil in the field is soft at 30 cm row spacing.</li> <li>Recommended variety – M-27.</li> <li>After 10-15 days of sowing plant to plant distance may be maintained at 10-15cm by thinning.</li> </ul>
Pulses	Sowing to early vegetative		For pea:  - Land preparation may be done. Sowing may be done at a spacing of 30cm x 10-15cm.  - Recommended variety - Rachana. Seed rate is 75 kg/ ha. Treat the seeds with Bavistin @ 2.5 mg/ lit of water followed by Rhizobium culture @ 20g/kg of seeds before sowing.  - Lentils may be sown with minimum tillage or zero tillage.
Rabi Maize	Land preparation		- Land preparation for sowing rabi maize may be started.
Storage	1 1		- Clean and store the seeds in RC-seed bins after proper drying. Check for germination of seeds or fungal growth. Well ventilated rooms must be used for storage of grains/ seeds.
Horticulture Cro	ps		
Potato	Planting to early vegetative		<ul> <li>Recommended varieties are Kufri Megha, Kufri Jyoti and Kufri Chipsona. Seed rate is 25-30 quintals/ hectare.</li> <li>Soil must be made to fine tilt and planted in furrows at a spacing of 25cm seed to seed and 45-50 cm row to row. If the soil is dry, give light irrigation prior to planting.</li> <li>Cover the seed/ tubers with soil to a depth 1-1½ inches.</li> </ul>
Onion	Early vegetative		<ul> <li>Give light watering during morning and evening hours for 7-10 days after transplanting.</li> <li>Thinning of nursery may be followed if there is shortage of land and manpower for transplanting.</li> </ul>



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### "Integrated Agromet Advisory Services"

Garlic	Planting to early		- Garlic bulblets may be planted in prepared beds.
	vegetative		- Give light irrigation during morning and evening hours is advised.
Cole Crops/	Vegetative		- Light watering to the crops during morning hours may be done.
Tomato, etc.			- Weeding must be done to avoid incidence of insects.
Garden pea	Vegetative		- Avoid plucking off of young shoots.
_			- Give light irrigation just to keep soil moist.
* Apply organic	mulches after earthi	ng up and weeding to c	conserve residual soil moisture as well as to maintain the soil temperature.
Animal Science	es		
Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
Poultry	All susceptible age groups	Coccidiosis	- Amprolium powder may be added in low dose in both feed (@25 g per 1000kg of mash) and drinking water (30g 25 lit of water) of poultry above 3 weeks of age.
		Management	<ul> <li>Increase energy feed upto 5% (like maize, rice bran, etc.).</li> <li>Add antibiotic, Hostacycline/ Duaprin @ 2 g/ lit of drinking water for 7 days along with vitamin B &amp; vitamin A.</li> </ul>
Sheep/ Goat	Above 3 months of age	Deworming	- Administer Banif Bolus orally @ 1 bolus/ 100 kg b. wt.
		Ectoparasite	Spray Butox @ 2ml in 1 lit of water for protection against mange and mites.
Pig	Above 3 months of age	Swine Fever	- Vaccinate against swine fever after the age of 3 months.
		Ectoparasites	- Spray Butox @ 2ml in 1 lit of water, twice a week.
		Deworming	- Deworm using Piperazine liquid @10-15 ml orally followed by half dose on second day.
Cattle / Buffalo/	Above 3 months	FMD	- Vaccinate against FMD.
Mithun	of age	Skin disease	- Spray Butox @ 2ml in 1 lit of water, twice a week.
Fisheries		I .	
Type of Farming	Stage	Management	Agro-metrological advisories
Carp culture	Grow-out	Pond water	- Maintained water depth of 1.0-1.5m.
<b>r</b>			- Apply Lime or Aqua magic regularly to maintain good quality pond water.
		Feeding	- Minimum feed must be provided in two splits @ 1-2 % of body weight per
			day.
		Harvest	- Harvesting may be done.
			- Check fish health from time to time by netting.

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



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



#### "Integrated Agromet Advisory Services"

# MANIPUR BULLETIN 26<sup>th</sup> November, 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 27<sup>th</sup> November to 1<sup>st</sup> December, 2013 as given below:

Significant past weather for the preceding bi-weekly of Imphal - West (22<sup>nd</sup> to 25<sup>th</sup> November, 2013)

During the past four days the sky was clear to partly cloudy but mainly cloudy during morning of  $22^{\rm nd}$  & afternoon of  $24^{\rm th}$  Nov. Also morning hours were foggy on  $25^{\rm th}$  Nov. **No** rainfall was recorded during past four days. Maximum temperature range observed was 26.6-27.4 °C, range of minimum temperature observed was 7.2-8.9 °C, mean relative humidity observed in morning and afternoon were 84.75 % and 51.25 % respectively. The average wind speed range was 1.1-1.9 km/hr.

Weather forecast for next five days of Imphal - East (27<sup>th</sup> November to 1<sup>st</sup> December, 2013)

There may be light rain on Friday & Saturday. Sky may be clear to partly cloudy on  $27^{th}$  Nov &  $1^{st}$  Dec and mainly cloudy during  $28^{th}$  to  $30^{th}$  Nov with maximum temp. of 25.0 - 27.0 °C & minimum temp. 6.0 - 8.0 °C. Relative Humidity may reach a maximum value of 100 % (maximum RH) & 63 % (minimum RH). The average wind speed may be 0-2 km/hr during next five days.

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
Field Crops	<u> </u>		
Rice	Post-harvest		<ul> <li>Threshing and drying of grains may be completed before rains which is may occur from Friday.</li> <li>After proper threshing, grains must be sundried well before storage. Dry grains/ seeds to 12-14% moisture if mechanical thresher is used.</li> </ul>
Rapeseed/ Mustard	Sowing to early vegetative		<ul> <li>After harvesting rice, zero tillage rapeseed may be sown (seed rate is 10-12 kg/ha) when soil in the field is soft at 30 cm row spacing.</li> <li>Recommended variety – M-27.</li> <li>After 10-15 days of sowing plant to plant distance may be maintained at 10-15cm by thinning.</li> </ul>
Pulses	Sowing to early vegetative		For pea:  - Land preparation may be done. Sowing may be done at a spacing of 30cm x 10-15cm.  - Recommended variety - Rachana. Seed rate is 75 kg/ ha. Treat the seeds with Bavistin @ 2.5 mg/ lit of water followed by Rhizobium culture @ 20g/kg of seeds before sowing.  - Lentils may be sown with minimum tillage or zero tillage.
Rabi Maize	Land preparation		- Land preparation for sowing rabi maize may be started.
Storage			- Clean and store the seeds in RC-seed bins after proper drying. Check for germination of seeds or fungal growth. Well ventilated rooms must be used for storage of grains/ seeds.
Horticulture Cro	ps		
Potato	Planting to early vegetative		<ul> <li>Recommended varieties are Kufri Megha, Kufri Jyoti and Kufri Chipsona. Seed rate is 25-30 quintals/ hectare.</li> <li>Soil must be made to fine tilt and planted in furrows at a spacing of 25cm seed to seed and 45-50 cm row to row. If the soil is dry, give light irrigation prior to planting.</li> <li>Cover the seed/ tubers with soil to a depth 1-1½ inches.</li> </ul>
Onion	Early vegetative		<ul> <li>Give light watering during morning and evening hours for 7-10 days after transplanting.</li> <li>Thinning of nursery may be followed if there is shortage of land and manpower for transplanting.</li> </ul>



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Garlic	Planting to early		- Garlic bulblets may be planted in prepared beds.
	vegetative		- Give light irrigation during morning and evening hours is advised.
Cabbage/	Vegetative		- Light watering to the crops during morning hours may be done.
Cauliflower/			- Weeding must be done to avoid incidence of insects.
Broccoli	Nursery		- Watering should be restricted in seedlings which are ready for
			transplanting if land is not yet prepared or manpower is not available due
			to coincidence with harvesting of paddy.
			- If slight yellowing of leaves of mature seedlings is observed then one
			spray of Carbendazim@ 1g/ lit of water is advised.
			- As there is light rain in forecast, transplanting may be completed at
			possible earliest for maximum utilization of the rain water for plant growth.
			-Also aphid infestation may be high due to high RH during morning and low minimum temp., i.e., below 10°C.
Tomato			- Light watering to the crops during morning hours may be done.
			- Weeding must be done to avoid incidence of insects.
Garden pea	Vegetative		- Avoid plucking off of young shoots.
			- Give light irrigation just to keep soil moist.
* Apply organic	mulches after earthi	ng up and weeding to c	onserve residual soil moisture as well as to maintain the soil temperature.
Animal Scienc	es		
Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
Poultry	All susceptible age groups	Coccidiosis	- Amprolium powder may be added in low dose in both feed (@25 g per 1000kg of mash) and drinking water (30g 25 lit of water) of poultry above
		3.6	3 weeks of age.
		Management	<ul> <li>Increase energy feed upto 5% (like maize, rice bran, etc.).</li> <li>Add antibiotic, Hostacycline/ Duaprin @ 2 g/ lit of drinking water for 7 days along with vitamin B &amp; vitamin A.</li> </ul>
Sheep/ Goat	Above 3 months of age	Deworming	- Administer Banif Bolus orally @ 1 bolus/ 100 kg b. wt.
•		Ectoparasite	Spray Butox @ 2ml in 1 lit of water for protection against mange and
Pig	Above 3 months	Swine Fever	<ul><li>mites.</li><li>Vaccinate against swine fever after the age of 3 months.</li></ul>
1 ig	of age	Ectoparasites	- Spray Butox @ 2ml in 1 lit of water, twice a week.
	38-		- Deworm using Piperazine liquid @10-15 ml orally followed by half dose
		Deworming	on second day.
Cattle / Buffalo/	Above 3 months	FMD	- Vaccinate against FMD.
Mithun	of age	Skin disease	- Spray Butox @ 2ml in 1 lit of water, twice a week.
E: I		5km disease	- Spray Butox & Ziii iii 1 lit of water, twice a week.
Fisheries Type of Farming	Stage	Management	Agro-metrological advisories
Carp culture	Grow-out	Pond water	- Maintained water depth of 1.0-1.5m.
Carp culture	Jiow-out	1 Oliu watel	- Apply Lime or Aqua magic regularly to maintain good quality pond water.
		Feeding	- Minimum feed must be provided in two splits @ 1-2 % of body weight per
		1 ccuing	day.
		Harvest	- Harvesting may be done.
		Tan vest	- Check fish health from time to time by netting.
	_]		- Check from hearth from time to time by fietting.



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#### 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 27<sup>th</sup> November to 1<sup>st</sup> December, 2013 as given below:

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During the past four days the sky was clear to partly cloudy but mainly cloudy during morning of  $22^{\rm nd}$  & afternoon of  $24^{\rm th}$  Nov. Also morning hours were foggy on  $25^{\rm th}$  Nov. **No** rainfall was recorded during past four days. Maximum temperature range observed was  $26.6-27.4\,^{\rm o}{\rm C}$ , range of minimum temperature observed was  $7.2-8.9\,^{\rm o}{\rm C}$ , mean relative humidity observed in morning and afternoon were  $84.75\,\%$  and  $51.25\,\%$  respectively. The average wind speed range was  $1.1-1.9\,$  km/hr.

Weather forecast for next five days of Imphal - West (27<sup>th</sup> November to 1<sup>st</sup> December, 2013)

There may be light rain on Friday & Saturday. Sky may be clear to partly cloudy on  $27^{th}$  Nov &  $1^{st}$  Dec and mainly cloudy during  $28^{th}$  to  $30^{th}$  Nov with maximum temp. of 25.0 - 26.0 °C & minimum temp. 5.0 - 7.0 °C. Relative Humidity may reach a maximum value of 100 % (maximum RH) & 61 % (minimum RH). The average wind speed may be 2-4 km/hr during next five days.

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
Field Crops	<u> </u>		
Rice	Post-harvest		<ul> <li>Threshing and drying of grains may be completed before rains which is may occur from Friday.</li> <li>After proper threshing, grains must be sundried well before storage. Dry grains/ seeds to 12-14% moisture if mechanical thresher is used.</li> </ul>
Rapeseed/ Mustard	Sowing to early vegetative		<ul> <li>After harvesting rice, zero tillage rapeseed may be sown (seed rate is 10-12 kg/ha) when soil in the field is soft at 30 cm row spacing.</li> <li>Recommended variety – M-27.</li> <li>After 10-15 days of sowing plant to plant distance may be maintained at 10-15cm by thinning.</li> </ul>
Pulses	Sowing to early vegetative		For pea:  - Land preparation may be done. Sowing may be done at a spacing of 30cm x 10-15cm.  - Recommended variety - Rachana. Seed rate is 75 kg/ ha. Treat the seeds with Bavistin @ 2.5 mg/ lit of water followed by Rhizobium culture @ 20g/kg of seeds before sowing.  - Lentils may be sown with minimum tillage or zero tillage.
Rabi Maize	Land preparation		- Land preparation for sowing rabi maize may be started.
Storage			- Clean and store the seeds in RC-seed bins after proper drying. Check for germination of seeds or fungal growth. Well ventilated rooms must be used for storage of grains/ seeds.
Horticulture Cro	ps		
Potato	Planting to early vegetative		<ul> <li>Recommended varieties are Kufri Megha, Kufri Jyoti and Kufri Chipsona. Seed rate is 25-30 quintals/ hectare.</li> <li>Soil must be made to fine tilt and planted in furrows at a spacing of 25cm seed to seed and 45-50 cm row to row. If the soil is dry, give light irrigation prior to planting.</li> <li>Cover the seed/ tubers with soil to a depth 1-1½ inches.</li> </ul>
Onion	Early vegetative		<ul> <li>Give light watering during morning and evening hours for 7-10 days after transplanting.</li> <li>Thinning of nursery may be followed if there is shortage of land and manpower for transplanting.</li> </ul>



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Garlic	Planting to early		- Garlic bulblets may be planted in prepared beds.
	vegetative		- Give light irrigation during morning and evening hours is advised.
Cabbage/	Vegetative		- Light watering to the crops during morning hours may be done.
Cauliflower/ Broccoli			- Weeding must be done to avoid incidence of insects.
	Nursery		- Watering should be restricted in seedlings which are ready for
			transplanting if land is not yet prepared or manpower is not available due
			to coincidence with harvesting of paddy.
			- If slight yellowing of leaves of mature seedlings is observed then one
			spray of Carbendazim@ 1g/ lit of water is advised.
			- As there is light rain in forecast, transplanting may be completed at
			possible earliest for maximum utilization of the rain water for plant growth.
			-Also aphid infestation may be high due to high RH during morning and
			low minimum temp., i.e., below 10°C.
Tomato			- Light watering to the crops during morning hours may be done.
			- Weeding must be done to avoid incidence of insects.
Garden pea	Vegetative		- Avoid plucking off of young shoots.
			- Give light irrigation just to keep soil moist.
		ng up and weeding to c	onserve residual soil moisture as well as to maintain the soil temperature.
Animal Science		T	
Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
Poultry	All susceptible age groups	Coccidiosis	- Amprolium powder may be added in low dose in both feed (@25 g per
			1000kg of mash) and drinking water (30g 25 lit of water) of poultry above 3 weeks of age.
		Management	- Increase energy feed upto 5% (like maize, rice bran, etc.).
			- Add antibiotic, Hostacycline/ Duaprin @ 2 g/ lit of drinking water for 7
			days along with vitamin B & vitamin A.
Sheep/ Goat	Above 3 months of age	Deworming	- Administer Banif Bolus orally @ 1 bolus/ 100 kg b. wt.
		Ectoparasite	Spray Butox @ 2ml in 1 lit of water for protection against mange and mites.
Pig	Above 3 months	Swine Fever	- Vaccinate against swine fever after the age of 3 months.
8	of age	Ectoparasites	- Spray Butox @ 2ml in 1 lit of water, twice a week.
		Deworming	- Deworm using Piperazine liquid @10-15 ml orally followed by half dose
		Deworming	on second day.
Cattle / Buffalo/	Above 3 months	FMD	- Vaccinate against FMD.
Mithun	of age	Skin disease	- Spray Butox @ 2ml in 1 lit of water, twice a week.
Fisheries			
Type of Farming	Stage	Management	Agro-metrological advisories
Carp culture	Grow-out	Pond water	- Maintained water depth of 1.0-1.5m.
1	GIOW-Out		<u> </u>
			- Apply Lime or Aqua magic regularly to maintain good quality bond water.
		Feeding	- Apply Lime or Aqua magic regularly to maintain good quality pond water Minimum feed must be provided in two splits @ 1-2 % of body weight per
		Feeding	- Minimum feed must be provided in two splits @ 1-2 % of body weight per
		Feeding  Harvest	



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#### "Integrated Agromet Advisory Services"

# MANIPUR BULLETIN 26<sup>th</sup> November, 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 27<sup>th</sup> November to 1<sup>st</sup> December, 2013 as given below:

Significant past weather for the preceding bi-weekly of Imphal - West (22<sup>nd</sup> to 25<sup>th</sup> November, 2013)

During the past four days the sky was clear to partly cloudy but mainly cloudy during morning of  $22^{nd}$  & afternoon of  $24^{th}$  Nov. Also morning hours were foggy on  $25^{th}$  Nov. **No** rainfall was recorded during past four days. Maximum temperature range observed was 26.6-27.4 °C, range of minimum temperature observed was 7.2-8.9 °C, mean relative humidity observed in morning and afternoon were 84.75 % and 51.25 % respectively. The average wind speed range was 1.1-1.9 km/hr.

Weather forecast for next five days of Senapati (27<sup>th</sup> November to 1<sup>st</sup> December, 2013)

There may be light rain on Friday & Saturday. Sky may be clear to partly cloudy on  $27^{th}$  Nov &  $1^{st}$  Dec and mainly cloudy during  $28^{th}$  to  $30^{th}$  Nov with maximum temp. of 23.0 - 24.0 °C & minimum temp. 5.0 - 8.0 °C. Relative Humidity may reach a maximum value of 100 % (maximum RH) & 61 % (minimum RH). The average wind speed may be 2-3 km/hr during next five days.

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
Field Crops	<u>'</u>		
Rice	Post-harvest		<ul> <li>Threshing and drying of grains may be completed before rains which is may occur from Friday.</li> <li>After proper threshing, grains must be sundried well before storage. Dry grains/ seeds to 12-14% moisture if mechanical thresher is used.</li> </ul>
Rapeseed/ Mustard	Sowing to early vegetative		<ul> <li>After harvesting rice, zero tillage rapeseed may be sown (seed rate is 10-12 kg/ha) when soil in the field is soft at 30 cm row spacing.</li> <li>Recommended variety – M-27.</li> <li>After 10-15 days of sowing plant to plant distance may be maintained at 10-15cm by thinning.</li> </ul>
Pulses	Sowing to early vegetative		For pea:  - Land preparation may be done. Sowing may be done at a spacing of 30cm x 10-15cm.  - Recommended variety - Rachana. Seed rate is 75 kg/ ha. Treat the seeds with Bavistin @ 2.5 mg/ lit of water followed by Rhizobium culture @ 20g/kg of seeds before sowing.  - Lentils may be sown with minimum tillage or zero tillage.
Rabi Maize	Land preparation		- Land preparation for sowing rabi maize may be started.
Storage	Zune preputation		Clean and store the seeds in RC-seed bins after proper drying. Check for germination of seeds or fungal growth. Well ventilated rooms must be used for storage of grains/ seeds.
Horticulture Cro	ps		, see a see age of g
Onion	Early vegetative		<ul> <li>Give light watering during morning and evening hours for 7-10 days after transplanting.</li> <li>Thinning of nursery may be followed if there is shortage of land and manpower for transplanting.</li> </ul>
Garlic	Planting to early vegetative		<ul> <li>Garlic bulblets may be planted in prepared beds.</li> <li>Give light irrigation during morning and evening hours is advised.</li> </ul>
Cole Crops/ Tomato, etc.	Vegetative		<ul> <li>Light watering to the crops during morning hours may be done.</li> <li>Weeding must be done to avoid incidence of insects.</li> </ul>
Garden pea	Vegetative		- Avoid plucking off of young shoots Give light irrigation just to keep soil moist.
* Apply organic	mulches after earthing	up and weeding to co	onserve residual soil moisture as well as to maintain the soil temperature.



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Animal Science	es		
Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
Poultry	All susceptible age groups	Coccidiosis	- Amprolium powder may be added in low dose in both feed (@25 g per 1000kg of mash) and drinking water (30g 25 lit of water) of poultry above 3 weeks of age.
		Management	<ul> <li>Increase energy feed upto 5% (like maize, rice bran, etc.).</li> <li>Add antibiotic, Hostacycline/ Duaprin @ 2 g/ lit of drinking water for 7 days along with vitamin B &amp; vitamin A.</li> </ul>
Sheep/ Goat	Above 3 months	Deworming	- Administer Banif Bolus orally @ 1 bolus/ 100 kg b. wt.
	of age	Ectoparasite	Spray Butox @ 2ml in 1 lit of water for protection against mange and mites.
Pig	Above 3 months of age	Swine Fever	- Vaccinate against swine fever after the age of 3 months.
		Ectoparasites	- Spray Butox @ 2ml in 1 lit of water, twice a week.
		Deworming	- Deworm using Piperazine liquid @10-15 ml orally followed by half dose on second day.
Cattle / Buffalo/	Above 3 months of age	FMD	- Vaccinate against FMD.
Mithun		Skin disease	- Spray Butox @ 2ml in 1 lit of water, twice a week.
Fisheries			
Type of Farming	Stage	Management	Agro-metrological advisories
Carp culture	Grow-out	Pond water	- Maintained water depth of 1.0-1.5m.
			- Apply Lime or Aqua magic regularly to maintain good quality pond water.
		Feeding	- Minimum feed must be provided in two splits @ 1-2 % of body weight per
			day.
		Harvest	- Harvesting may be done.
			- Check fish health from time to time by netting.

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



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#### "Integrated Agromet Advisory Services"

# MANIPUR BULLETIN 26<sup>th</sup> November, 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 27<sup>th</sup> November to 1<sup>st</sup> December, 2013 as given below:

Significant past weather for the preceding bi-weekly of Imphal - West (22<sup>nd</sup> to 25<sup>th</sup> November, 2013)

During the past four days the sky was clear to partly cloudy but mainly cloudy during morning of  $22^{\rm nd}$  & afternoon of  $24^{\rm th}$  Nov. Also morning hours were foggy on  $25^{\rm th}$  Nov. **No** rainfall was recorded during past four days. Maximum temperature range observed was  $26.6-27.4\,^{\rm o}{\rm C}$ , range of minimum temperature observed was  $7.2-8.9\,^{\rm o}{\rm C}$ , mean relative humidity observed in morning and afternoon were  $84.75\,\%$  and  $51.25\,\%$  respectively. The average wind speed range was  $1.1-1.9\,$  km/hr.

Weather forecast for next five days of Tamenglong (27<sup>th</sup> November to 1<sup>st</sup> December, 2013)

There may be light rain on Friday & Saturday. Sky may be clear to partly cloudy on  $27^{th}$  Nov &  $1^{st}$  Dec and mainly cloudy during  $28^{th}$  to  $30^{th}$  Nov with maximum temp. of 24.0 - 26.0 °C & minimum temp. 6.0 - 10.0 °C. Relative Humidity may reach a maximum value of 100 % (maximum RH) & 59 % (minimum RH). The average wind speed may be 2-4 km/hr during next five days.

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
Field Crops			
Rice	Post-harvest		<ul> <li>Threshing and drying of grains may be completed before rains which is may occur from Friday.</li> <li>After proper threshing, grains must be sundried well before storage. Dry grains/ seeds to 12-14% moisture if mechanical thresher is used.</li> </ul>
Rapeseed/ Mustard	Sowing to early vegetative		<ul> <li>After harvesting rice, zero tillage rapeseed may be sown (seed rate is 10-12 kg/ha) when soil in the field is soft at 30 cm row spacing.</li> <li>Recommended variety – M-27.</li> <li>After 10-15 days of sowing plant to plant distance may be maintained at 10-15cm by thinning.</li> </ul>
Pulses	Sowing to early vegetative		For pea:  - Land preparation may be done. Sowing may be done at a spacing of 30cm x 10-15cm.  - Recommended variety - Rachana. Seed rate is 75 kg/ ha. Treat the seeds with Bavistin @ 2.5 mg/ lit of water followed by Rhizobium culture @ 20g/kg of seeds before sowing.  - Lentils may be sown with minimum tillage or zero tillage.
Rabi Maize	Land preparation		- Land preparation for sowing rabi maize may be started.
Storage	T T		- Clean and store the seeds in RC-seed bins after proper drying. Check for germination of seeds or fungal growth. Well ventilated rooms must be used for storage of grains/ seeds.
Horticulture Cro	ps		
Potato	Planting to early vegetative		<ul> <li>Recommended varieties are Kufri Megha, Kufri Jyoti and Kufri Chipsona. Seed rate is 25-30 quintals/ hectare.</li> <li>Soil must be made to fine tilt and planted in furrows at a spacing of 25cm seed to seed and 45-50 cm row to row. If the soil is dry, give light irrigation prior to planting.</li> <li>Cover the seed/ tubers with soil to a depth 1-1½ inches.</li> </ul>
Onion	Early vegetative		<ul> <li>Give light watering during morning and evening hours for 7-10 days after transplanting.</li> <li>Thinning of nursery may be followed if there is shortage of land and manpower for transplanting.</li> </ul>



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



Garlic	Planting to early		- Garlic bulblets may be planted in prepared beds.
	vegetative		- Give light irrigation during morning and evening hours is advised.
Cabbage/	Vegetative		- Light watering to the crops during morning hours may be done.
Cauliflower/			- Weeding must be done to avoid incidence of insects.
Broccoli	Nursery		- Watering should be restricted in seedlings which are ready for
			transplanting if land is not yet prepared or manpower is not available due
			to coincidence with harvesting of paddy.
			- If slight yellowing of leaves of mature seedlings is observed then one
			spray of Carbendazim@ 1g/ lit of water is advised.
			- As there is light rain in forecast, transplanting may be completed at
			possible earliest for maximum utilization of the rain water for plant
			growth.
			-Also aphid infestation may be high due to high RH during morning and low minimum temp., i.e., below 10°C.
Tomato			- Light watering to the crops during morning hours may be done.
			- Weeding must be done to avoid incidence of insects.
Garden pea	Vegetative		- Avoid plucking off of young shoots.
			- Give light irrigation just to keep soil moist.
		ng up and weeding to c	conserve residual soil moisture as well as to maintain the soil temperature.
Animal Science	_	D: /	
Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
Poultry	All susceptible age groups	Coccidiosis	- Amprolium powder may be added in low dose in both feed (@25 g per
			1000kg of mash) and drinking water (30g 25 lit of water) of poultry above
			3 weeks of age.
		Management	- Increase energy feed upto 5% (like maize, rice bran, etc.).
			- Add antibiotic, Hostacycline/ Duaprin @ 2 g/ lit of drinking water for 7
~			days along with vitamin B & vitamin A.
Sheep/ Goat	Above 3 months of age	Deworming	- Administer Banif Bolus orally @ 1 bolus/ 100 kg b. wt.
		Ectoparasite	Spray Butox @ 2ml in 1 lit of water for protection against mange and
			mites.
Pig	Above 3 months	Swine Fever	- Vaccinate against swine fever after the age of 3 months.
	of age	Ectoparasites	- Spray Butox @ 2ml in 1 lit of water, twice a week.
		Deworming	- Deworm using Piperazine liquid @10-15 ml orally followed by half dose
			on second day.
Cattle / Buffalo/	Above 3 months	FMD	- Vaccinate against FMD.
Mithun	of age	Skin disease	- Spray Butox @ 2ml in 1 lit of water, twice a week.
Fisheries			
Type of Farming	Stage	Management	Agro-metrological advisories
Carp culture	Grow-out	Pond water	- Maintained water depth of 1.0-1.5m.
			- Apply Lime or Aqua magic regularly to maintain good quality pond water.
		Feeding	- Minimum feed must be provided in two splits @ 1-2 % of body weight per
			day.
		Harvest	- Harvesting may be done.
			- Check fish health from time to time by netting.



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



#### "Integrated Agromet Advisory Services"

# MANIPUR BULLETIN 26<sup>th</sup> November, 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 27<sup>th</sup> November to 1<sup>st</sup> December, 2013 as given below:

Significant past weather for the preceding bi-weekly of Imphal - West (22<sup>nd</sup> to 25<sup>th</sup> November, 2013)

During the past four days the sky was clear to partly cloudy but mainly cloudy during morning of  $22^{\rm nd}$  & afternoon of  $24^{\rm th}$  Nov. Also morning hours were foggy on  $25^{\rm th}$  Nov. **No** rainfall was recorded during past four days. Maximum temperature range observed was 26.6-27.4 °C, range of minimum temperature observed was 7.2-8.9 °C, mean relative humidity observed in morning and afternoon were 84.75 % and 51.25 % respectively. The average wind speed range was 1.1-1.9 km/hr.

Weather forecast for next five days of Thoubal (27<sup>th</sup> November to 1<sup>st</sup> December, 2013)

There may be light rain on Friday & Saturday. Sky may be clear to partly cloudy on  $27^{th}$  Nov &  $1^{st}$  Dec and mainly cloudy during  $28^{th}$  to  $30^{th}$  Nov with maximum temp. of 24.0 - 25.0 °C & minimum temp. 10.0 °C. Relative Humidity may reach a maximum value of 100 % (maximum RH) & 61 % (minimum RH). The average wind speed may be 2 km/hr during next five days.

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
Field Crops	<u>'</u>		
Rice	Post-harvest		<ul> <li>Threshing and drying of grains may be completed before rains which is may occur from Friday.</li> <li>After proper threshing, grains must be sundried well before storage. Dry grains/ seeds to 12-14% moisture if mechanical thresher is used.</li> </ul>
Rapeseed/ Mustard	Sowing to early vegetative		<ul> <li>After harvesting rice, zero tillage rapeseed may be sown (seed rate is 10-12 kg/ha) when soil in the field is soft at 30 cm row spacing.</li> <li>Recommended variety – M-27.</li> <li>After 10-15 days of sowing plant to plant distance may be maintained at 10-15cm by thinning.</li> </ul>
Pulses	Sowing to early vegetative		For pea:  - Land preparation may be done. Sowing may be done at a spacing of 30cm x 10-15cm.  - Recommended variety - Rachana. Seed rate is 75 kg/ ha. Treat the seeds with Bavistin @ 2.5 mg/ lit of water followed by Rhizobium culture @ 20g/kg of seeds before sowing.  - Lentils may be sown with minimum tillage or zero tillage.
Rabi Maize	Land preparation		- Land preparation for sowing rabi maize may be started.
Storage	1 1		- Clean and store the seeds in RC-seed bins after proper drying. Check for germination of seeds or fungal growth. Well ventilated rooms must be used for storage of grains/ seeds.
Horticulture Cro	ps		
Potato	Planting to early vegetative		<ul> <li>Recommended varieties are Kufri Megha, Kufri Jyoti and Kufri Chipsona. Seed rate is 25-30 quintals/ hectare.</li> <li>Soil must be made to fine tilt and planted in furrows at a spacing of 25cm seed to seed and 45-50 cm row to row. If the soil is dry, give light irrigation prior to planting.</li> <li>Cover the seed/ tubers with soil to a depth 1-1½ inches.</li> </ul>
Onion	Early vegetative		<ul> <li>Give light watering during morning and evening hours for 7-10 days after transplanting.</li> <li>Thinning of nursery may be followed if there is shortage of land and manpower for transplanting.</li> </ul>



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Garlic	Planting to early		- Garlic bulblets may be planted in prepared beds.
	vegetative		- Give light irrigation during morning and evening hours is advised.
Cabbage/	Vegetative		- Light watering to the crops during morning hours may be done.
Cauliflower/			- Weeding must be done to avoid incidence of insects.
Broccoli	Nursery		- Watering should be restricted in seedlings which are ready for
			transplanting if land is not yet prepared or manpower is not available due
			to coincidence with harvesting of paddy.
			- If slight yellowing of leaves of mature seedlings is observed then one
			spray of Carbendazim@ 1g/ lit of water is advised.
			- As there is light rain in forecast, transplanting may be completed at
			possible earliest for maximum utilization of the rain water for plant
			growth.
			-Also aphid infestation may be high due to high RH during morning and low minimum temp., i.e., below 10°C.
Tomato			- Light watering to the crops during morning hours may be done.
			- Weeding must be done to avoid incidence of insects.
Garden pea	Vegetative		- Avoid plucking off of young shoots.
			- Give light irrigation just to keep soil moist.
		ng up and weeding to c	conserve residual soil moisture as well as to maintain the soil temperature.
Animal Science		7.0	
Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
Poultry	All susceptible age groups	Coccidiosis	- Amprolium powder may be added in low dose in both feed (@25 g per
			1000kg of mash) and drinking water (30g 25 lit of water) of poultry above
			3 weeks of age.
		Management	- Increase energy feed upto 5% (like maize, rice bran, etc.).
			- Add antibiotic, Hostacycline/ Duaprin @ 2 g/ lit of drinking water for 7
~		-	days along with vitamin B & vitamin A.
Sheep/ Goat	Above 3 months of age	Deworming	- Administer Banif Bolus orally @ 1 bolus/ 100 kg b. wt.
		Ectoparasite	Spray Butox @ 2ml in 1 lit of water for protection against mange and
			mites.
Pig	Above 3 months	Swine Fever	- Vaccinate against swine fever after the age of 3 months.
	of age	Ectoparasites	- Spray Butox @ 2ml in 1 lit of water, twice a week.
		Deworming	- Deworm using Piperazine liquid @10-15 ml orally followed by half dose
			on second day.
Cattle / Buffalo/	Above 3 months	FMD	- Vaccinate against FMD.
Mithun	of age	Skin disease	- Spray Butox @ 2ml in 1 lit of water, twice a week.
Fisheries			
Type of Farming	Stage	Management	Agro-metrological advisories
Carp culture	Grow-out	Pond water	- Maintained water depth of 1.0-1.5m.
			- Apply Lime or Aqua magic regularly to maintain good quality pond water.
		Feeding	- Minimum feed must be provided in two splits @ 1-2 % of body weight per
			day.
		Harvest	- Harvesting may be done.
			- Check fish health from time to time by netting.



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



#### "Integrated Agromet Advisory Services"

# MANIPUR BULLETIN 26<sup>th</sup> November, 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 27<sup>th</sup> November to 1<sup>st</sup> December, 2013 as given below:

Significant past weather for the preceding bi-weekly of Imphal - West (22<sup>nd</sup> to 25<sup>th</sup> November, 2013)

During the past four days the sky was clear to partly cloudy but mainly cloudy during morning of  $22^{nd}$  & afternoon of  $24^{th}$  Nov. Also morning hours were foggy on  $25^{th}$  Nov. **No** rainfall was recorded during past four days. Maximum temperature range observed was 26.6-27.4 °C, range of minimum temperature observed was 7.2-8.9 °C, mean relative humidity observed in morning and afternoon were 84.75 % and 51.25 % respectively. The average wind speed range was 1.1-1.9 km/hr.

Weather forecast for next five days of Ukhrul (27<sup>th</sup> November to 1<sup>st</sup> December, 2013)

There may be light rain on Friday & Saturday. Sky may be clear to partly cloudy on  $27^{\text{th}}$  Nov &  $1^{\text{st}}$  Dec and mainly cloudy during  $28^{\text{th}}$  to  $30^{\text{th}}$  Nov with maximum temp. of  $21.0~^{\circ}\text{C}$  & minimum temp.  $8.0~-~10.0~^{\circ}\text{C}$ . Relative Humidity may reach a maximum value of 98~% (maximum RH) & 56~% (minimum RH). The average wind speed may be 2-4~km/hr during next five days.

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
Field Crops			
Rice	Post-harvest		<ul> <li>Threshing and drying of grains may be completed before rains which is may occur from Friday.</li> <li>After proper threshing, grains must be sundried well before storage. Dry grains/ seeds to 12-14% moisture if mechanical thresher is used.</li> </ul>
Rapeseed/ Mustard	Sowing to early vegetative		<ul> <li>After harvesting rice, zero tillage rapeseed may be sown (seed rate is 10-12 kg/ha) when soil in the field is soft at 30 cm row spacing.</li> <li>Recommended variety – M-27.</li> <li>After 10-15 days of sowing plant to plant distance may be maintained at 10-15cm by thinning.</li> </ul>
Pulses	Sowing to early vegetative		For pea:  - Land preparation may be done. Sowing may be done at a spacing of 30cm x 10-15cm.  - Recommended variety - Rachana. Seed rate is 75 kg/ ha. Treat the seeds with Bavistin @ 2.5 mg/ lit of water followed by Rhizobium culture @ 20g/kg of seeds before sowing.  - Lentils may be sown with minimum tillage or zero tillage.
Rabi Maize	Land preparation		- Land preparation for sowing rabi maize may be started.
Storage			- Clean and store the seeds in RC-seed bins after proper drying. Check for germination of seeds or fungal growth. Well ventilated rooms must be used for storage of grains/ seeds.
Horticulture Cro	ps		
Onion	Early vegetative		<ul> <li>Give light watering during morning and evening hours for 7-10 days after transplanting.</li> <li>Thinning of nursery may be followed if there is shortage of land and manpower for transplanting.</li> </ul>
Garlic	Planting to early vegetative		<ul><li>Garlic bulblets may be planted in prepared beds.</li><li>Give light irrigation during morning and evening hours is advised.</li></ul>
Cole Crops/ Tomato, etc.	Vegetative		<ul><li>Light watering to the crops during morning hours may be done.</li><li>Weeding must be done to avoid incidence of insects.</li></ul>
Garden pea	Vegetative		- Avoid plucking off of young shoots Give light irrigation just to keep soil moist.



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



## "Integrated Agromet Advisory Services"

Animal Scienc	es		
Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
Poultry	All susceptible age groups	Coccidiosis	- Amprolium powder may be added in low dose in both feed (@25 g per 1000kg of mash) and drinking water (30g 25 lit of water) of poultry above 3 weeks of age.
		Management	<ul> <li>Increase energy feed upto 5% (like maize, rice bran, etc.).</li> <li>Add antibiotic, Hostacycline/ Duaprin @ 2 g/ lit of drinking water for 7 days along with vitamin B &amp; vitamin A.</li> </ul>
Sheep/ Goat	Above 3 months of age	Deworming	- Administer Banif Bolus orally @ 1 bolus/ 100 kg b. wt.
		Ectoparasite	Spray Butox @ 2ml in 1 lit of water for protection against mange and mites.
Pig	Above 3 months of age	Swine Fever	- Vaccinate against swine fever after the age of 3 months.
		Ectoparasites	- Spray Butox @ 2ml in 1 lit of water, twice a week.
		Deworming	- Deworm using Piperazine liquid @10-15 ml orally followed by half dose on second day.
Cattle / Buffalo/ Mithun	Above 3 months of age	FMD	- Vaccinate against FMD.
		Skin disease	- Spray Butox @ 2ml in 1 lit of water, twice a week.
Fisheries	1		'
Type of Farming	Stage	Management	Agro-metrological advisories
Carp culture	Grow-out	Pond water	<ul><li>Maintained water depth of 1.0-1.5m.</li><li>Apply Lime or Aqua magic regularly to maintain good quality pond water.</li></ul>
		Feeding	- Minimum feed must be provided in two splits @ 1-2 % of body weight per day.
		Harvest	- Harvesting may be done.
			- Check fish health from time to time by netting.

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



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



#### "Integrated Agromet Advisory Services"

# MANIPUR BULLETIN 26<sup>th</sup> November, 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 27<sup>th</sup> November to 1<sup>st</sup> December, 2013 as given below:

Significant past weather for the preceding bi-weekly of Imphal - West (22<sup>nd</sup> to 25<sup>th</sup> November, 2013)

During the past four days the sky was clear to partly cloudy but mainly cloudy during morning of  $22^{\rm nd}$  & afternoon of  $24^{\rm th}$  Nov. Also morning hours were foggy on  $25^{\rm th}$  Nov. **No** rainfall was recorded during past four days. Maximum temperature range observed was 26.6-27.4 °C, range of minimum temperature observed was 7.2-8.9 °C, mean relative humidity observed in morning and afternoon were 84.75 % and 51.25 % respectively. The average wind speed range was 1.1-1.9 km/hr.

Weather forecast for next five days of Bishnupur (27<sup>th</sup> November to 1<sup>st</sup> December, 2013)

There may be light rain on Friday & Saturday. Sky may be clear to partly cloudy on  $27^{th}$  Nov &  $1^{st}$  Dec and mainly cloudy during  $28^{th}$  to  $30^{th}$  Nov with maximum temp. of 24.0 - 26.0 °C & minimum temp. 6.0 - 9.0 °C. Relative Humidity may reach a maximum value of 100 % (maximum RH) & 60 % (minimum RH). The average wind speed may be 2 km/hr during next five days.

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
Field Crops	<u>'</u>		
Rice	Post-harvest		<ul> <li>Threshing and drying of grains may be completed before rains which is may occur from Friday.</li> <li>After proper threshing, grains must be sundried well before storage. Dry grains/ seeds to 12-14% moisture if mechanical thresher is used.</li> </ul>
Rapeseed/ Mustard	Sowing to early vegetative		<ul> <li>After harvesting rice, zero tillage rapeseed may be sown (seed rate is 10-12 kg/ha) when soil in the field is soft at 30 cm row spacing.</li> <li>Recommended variety – M-27.</li> <li>After 10-15 days of sowing plant to plant distance may be maintained at 10-15cm by thinning.</li> </ul>
Pulses	Sowing to early vegetative		For pea:  - Land preparation may be done. Sowing may be done at a spacing of 30cm x 10-15cm.  - Recommended variety - Rachana. Seed rate is 75 kg/ ha. Treat the seeds with Bavistin @ 2.5 mg/ lit of water followed by Rhizobium culture @ 20g/kg of seeds before sowing.  - Lentils may be sown with minimum tillage or zero tillage.
Rabi Maize	Land preparation		- Land preparation for sowing rabi maize may be started.
Storage	1 1		- Clean and store the seeds in RC-seed bins after proper drying. Check for germination of seeds or fungal growth. Well ventilated rooms must be used for storage of grains/ seeds.
Horticulture Cro	ps		
Potato	Planting to early vegetative		<ul> <li>Recommended varieties are Kufri Megha, Kufri Jyoti and Kufri Chipsona. Seed rate is 25-30 quintals/ hectare.</li> <li>Soil must be made to fine tilt and planted in furrows at a spacing of 25cm seed to seed and 45-50 cm row to row. If the soil is dry, give light irrigation prior to planting.</li> <li>Cover the seed/ tubers with soil to a depth 1-1½ inches.</li> </ul>
Onion	Early vegetative		<ul> <li>Give light watering during morning and evening hours for 7-10 days after transplanting.</li> <li>Thinning of nursery may be followed if there is shortage of land and manpower for transplanting.</li> </ul>



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



Garlic	Planting to early		- Garlic bulblets may be planted in prepared beds.
	vegetative		- Give light irrigation during morning and evening hours is advised.
Cabbage/	Vegetative		- Light watering to the crops during morning hours may be done.
Cauliflower/ Broccoli			- Weeding must be done to avoid incidence of insects.
	Nursery		- Watering should be restricted in seedlings which are ready for
			transplanting if land is not yet prepared or manpower is not available due
			to coincidence with harvesting of paddy.
			- If slight yellowing of leaves of mature seedlings is observed then one
			spray of Carbendazim@ 1g/ lit of water is advised.
			- As there is light rain in forecast, transplanting may be completed at
			possible earliest for maximum utilization of the rain water for plant growth.
			-Also aphid infestation may be high due to high RH during morning and
			low minimum temp., i.e., below 10°C.
Tomato			- Light watering to the crops during morning hours may be done.
			- Weeding must be done to avoid incidence of insects.
Garden pea	Vegetative		- Avoid plucking off of young shoots.
			- Give light irrigation just to keep soil moist.
		ng up and weeding to c	onserve residual soil moisture as well as to maintain the soil temperature.
Animal Science	_		
Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
Poultry	All susceptible	Coccidiosis	- Amprolium powder may be added in low dose in both feed (@25 g per
	age groups		1000kg of mash) and drinking water (30g 25 lit of water) of poultry above 3 weeks of age.
		Management	- Increase energy feed upto 5% (like maize, rice bran, etc.).
		Management	- Add antibiotic, Hostacycline/ Duaprin @ 2 g/ lit of drinking water for 7
			days along with vitamin B & vitamin A.
Sheep/ Goat	Above 3 months of age	Deworming	- Administer Banif Bolus orally @ 1 bolus/ 100 kg b. wt.
энсер ч			Spray Butox @ 2ml in 1 lit of water for protection against mange and
		Ectoparasite	mites.
Pig	Above 3 months of age	Swine Fever	- Vaccinate against swine fever after the age of 3 months.
		Ectoparasites	- Spray Butox @ 2ml in 1 lit of water, twice a week.
		Deworming	- Deworm using Piperazine liquid @10-15 ml orally followed by half dose
			on second day.
Cattle / Buffalo/	Above 3 months of age	FMD	- Vaccinate against FMD.
Mithun		Skin disease	- Spray Butox @ 2ml in 1 lit of water, twice a week.
Fisheries			
Type of Farming	Stage	Management	Agro-metrological advisories
Carp culture	Grow-out	Pond water	- Maintained water depth of 1.0-1.5m.
			- Apply Lime or Aqua magic regularly to maintain good quality pond water.
		Feeding	- Minimum feed must be provided in two splits @ 1-2 % of body weight per
			day.
		Harvest	- Harvesting may be done.
			- Check fish health from time to time by netting.



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



#### "Integrated Agromet Advisory Services"

# MANIPUR BULLETIN 26<sup>th</sup> November, 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 27<sup>th</sup> November to 1<sup>st</sup> December, 2013 as given below:

Significant past weather for the preceding bi-weekly of Imphal - West (22<sup>nd</sup> to 25<sup>th</sup> November, 2013)

During the past four days the sky was clear to partly cloudy but mainly cloudy during morning of  $22^{nd}$  & afternoon of  $24^{th}$  Nov. Also morning hours were foggy on  $25^{th}$  Nov. **No** rainfall was recorded during past four days. Maximum temperature range observed was 26.6-27.4 °C, range of minimum temperature observed was 7.2-8.9 °C, mean relative humidity observed in morning and afternoon were 84.75 % and 51.25 % respectively. The average wind speed range was 1.1-1.9 km/hr.

Weather forecast for next five days of Chandel (27<sup>th</sup> November to 1<sup>st</sup> December, 2013)

There may be light rain on Friday & Saturday. Sky may be clear to partly cloudy on  $27^{th}$  Nov &  $1^{st}$  Dec and mainly cloudy during  $28^{th}$  to  $30^{th}$  Nov with maximum temp. of 23.0 - 24.0 °C & minimum temp. 12.0 - 13.0 °C. Relative Humidity may reach a maximum value of 99 % (maximum RH) & 57 % (minimum RH). The average wind speed may be 2 km/hr during next five days.

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
Field Crops	<u>'</u>		
Rice	Post-harvest		<ul> <li>Threshing and drying of grains may be completed before rains which is may occur from Friday.</li> <li>After proper threshing, grains must be sundried well before storage. Dry grains/ seeds to 12-14% moisture if mechanical thresher is used.</li> </ul>
Rapeseed/ Mustard	Sowing to early vegetative		<ul> <li>After harvesting rice, zero tillage rapeseed may be sown (seed rate is 10-12 kg/ha) when soil in the field is soft at 30 cm row spacing.</li> <li>Recommended variety – M-27.</li> <li>After 10-15 days of sowing plant to plant distance may be maintained at 10-15cm by thinning.</li> </ul>
Pulses	Sowing to early vegetative		For pea:  - Land preparation may be done. Sowing may be done at a spacing of 30cm x 10-15cm.  - Recommended variety - Rachana. Seed rate is 75 kg/ ha. Treat the seeds with Bavistin @ 2.5 mg/ lit of water followed by Rhizobium culture @ 20g/kg of seeds before sowing.  - Lentils may be sown with minimum tillage or zero tillage.
Rabi Maize	Land preparation		- Land preparation for sowing rabi maize may be started.
Storage	1 1		- Clean and store the seeds in RC-seed bins after proper drying. Check for germination of seeds or fungal growth. Well ventilated rooms must be used for storage of grains/ seeds.
Horticulture Cro	ps		
Potato	Planting to early vegetative		<ul> <li>Recommended varieties are Kufri Megha, Kufri Jyoti and Kufri Chipsona. Seed rate is 25-30 quintals/ hectare.</li> <li>Soil must be made to fine tilt and planted in furrows at a spacing of 25cm seed to seed and 45-50 cm row to row. If the soil is dry, give light irrigation prior to planting.</li> <li>Cover the seed/ tubers with soil to a depth 1-1½ inches.</li> </ul>
Onion	Early vegetative		<ul> <li>Give light watering during morning and evening hours for 7-10 days after transplanting.</li> <li>Thinning of nursery may be followed if there is shortage of land and manpower for transplanting.</li> </ul>



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



Garlic	Planting to early		- Garlic bulblets may be planted in prepared beds.
	vegetative		- Give light irrigation during morning and evening hours is advised.
Cabbage/ Cauliflower/ Broccoli	Vegetative		- Light watering to the crops during morning hours may be done.
			- Weeding must be done to avoid incidence of insects.
	Nursery		- Watering should be restricted in seedlings which are ready for
			transplanting if land is not yet prepared or manpower is not available due
			to coincidence with harvesting of paddy.
			- If slight yellowing of leaves of mature seedlings is observed then one
			spray of Carbendazim@ 1g/ lit of water is advised.
			- As there is light rain in forecast, transplanting may be completed at
			possible earliest for maximum utilization of the rain water for plant growth.
			-Also aphid infestation may be high due to high RH during morning and
			low minimum temp., i.e., below 10°C.
Tomato			- Light watering to the crops during morning hours may be done.
			- Weeding must be done to avoid incidence of insects.
Garden pea	Vegetative		- Avoid plucking off of young shoots.
			- Give light irrigation just to keep soil moist.
* Apply organic	mulches after earthi	ng up and weeding to c	onserve residual soil moisture as well as to maintain the soil temperature.
Animal Scienc	es		
Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
Poultry	All susceptible age groups	Coccidiosis	- Amprolium powder may be added in low dose in both feed (@25 g per
			1000kg of mash) and drinking water (30g 25 lit of water) of poultry above 3 weeks of age.
		Management	- Increase energy feed upto 5% (like maize, rice bran, etc.).
			- Add antibiotic, Hostacycline/ Duaprin @ 2 g/ lit of drinking water for 7
			days along with vitamin B & vitamin A.
Sheep/ Goat	Above 3 months of age	Deworming	- Administer Banif Bolus orally @ 1 bolus/ 100 kg b. wt.
		Ectoparasite	Spray Butox @ 2ml in 1 lit of water for protection against mange and
			mites.
Pig	Above 3 months of age	Swine Fever	- Vaccinate against swine fever after the age of 3 months.
		Ectoparasites	- Spray Butox @ 2ml in 1 lit of water, twice a week.
		Deworming	- Deworm using Piperazine liquid @10-15 ml orally followed by half dose
			on second day.
Cattle / Buffalo/	Above 3 months	FMD	- Vaccinate against FMD.
Mithun	of age	Skin disease	- Spray Butox @ 2ml in 1 lit of water, twice a week.
Fisheries			
Type of Farming	Stage	Management	Agro-metrological advisories
Carp culture	Grow-out	Pond water	- Maintained water depth of 1.0-1.5m.
			- Apply Lime or Aqua magic regularly to maintain good quality pond water.
		Feeding	- Minimum feed must be provided in two splits @ 1-2 % of body weight per
			day.
		Harvest	- Harvesting may be done.
			- Check fish health from time to time by netting.