



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



“Integrated Agromet Advisory Services”

MANIPUR BULLETIN

25th October, 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 26th to 30th October, 2013 as given below:

<p><u>Significant past weather for the preceding bi-weekly of Imphal - West (22nd to 24th October, 2013)</u></p> <p>During the past three days the sky was partly cloudy to cloudy but mainly clear during afternoon hours of 24 Oct. 16.3 mm rainfall was recorded during past four days. Maximum temperature range observed was 26.4 – 29.7 °C, range of minimum temperature observed was 16.6 – 19.0 °C, mean relative humidity observed in morning and afternoon were 94.3 % and 71.0 % respectively. The average wind speed range was 0.5 – 0.6 km/hr.</p>	<p><u>Weather forecast for next five days of Bishnupur (26th to 30th October, 2013)</u></p> <p>There may be light to moderate rains upto Wednesday. The sky may be partly cloudy to cloudy with maximum temp. of 25.0 - 28.0 °C and minimum temp. of 15.0 – 16.0 °C. RH may reach a maximum value of 100 % (maximum RH) & 90 % (minimum RH). The average wind speed may be 2-4 km/hr during next five days.</p>
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Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
Field Crops			
Rice	Maturity to harvesting		<ul style="list-style-type: none"> - Drain out excess water 10 days before harvesting. - Harvesting may be done, if 75-80 % of the spikelet is yellow in colour. - Panicles may be stacked for 5-7 days. Turn the heap of panicles regularly for better threshing. - After proper threshing, grains must be sundried well before storage.
Soybean	Harvesting and post-harvest		<ul style="list-style-type: none"> - Before rains, harvest when all the leaves are yellow. Stake in bundles under the sun or shade to dry. Thresh after 7-10 days of drying. Grain should be fully sundried to (10-12) % moisture.
Groundnut	Harvesting and post-harvest		<ul style="list-style-type: none"> - Mature crops may be harvested before rains. Harvested pods should be dried in sunlight for 3-4 days by spreading in a thin layer on a threshing floor.
Blackgram / rice bean	Pod formation	Hairy caterpillars	<ul style="list-style-type: none"> - Dichlorovos 76 EC 0.05% (10 ml/ 15 lit of water) on dry days. - Weeding may be done for proper utilization of nutrients and moisture by the crop.
Storage			<ul style="list-style-type: none"> - Clean and store the seeds in RC-seed bins after proper drying. Check for germination of seeds or fungal growth.
Horticulture Crops			
Land preparation may be carried after rains only when field conditions permits.			
Potato	Seed/ tuber treatment		<ul style="list-style-type: none"> - Collect seed tubers from reliable source and treated it with Sixer (Carbendazim + Mencozeb) @ 2 gm/lit of water for 20 minutes and dry in shed before planting as preventive measure against soil borne diseases.
Vegetable nursery (Cole Crops/ Tomato)	Nursery		<ul style="list-style-type: none"> - Prepare raised nursery bed (of 18-20 cm height) for cloe crops & tomato. - To avoid soil borne diseases, nursery bed must be dried properly. - Incorporate Captan 50 WP or Carbendazim before sowing.
Mushroom	Procurement of mushroom spawn		<p>Oyster mushroom can be grown during this season (optimum temperature is 22.0 to 28.0 °C). Interested farmers may undergo skill oriented training on cultivation of Oyster mushroom.</p> <ul style="list-style-type: none"> - 10 x 20 feet clean and sanitized room or shed is sufficient for beginning the cultivation.
Vegetable nursery (Cole Crops/ Tomato/ Garden pea, etc.)	Land preparation for direct sowing/ transplanting		<ul style="list-style-type: none"> - Incorporate Tricoderma harzianum @ 5-6 kg/ sangam at the time of final land preparation (about 4-5 days ahead of sowing/ transplanting). - Transplant 25-30 days old seedlings (4 leaves stage) of cole crops and tomato. - Treat garden pea seeds (variety like Arkel, Azad) with Bavistin @ 2.5 mg/ lit of water before sowing.



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Onion	Nursery		Provide temporary rain shelter and make proper drainage around the plot.
Off season vegetables under protected cultivation	Transplanted tomato or king chilli		<ul style="list-style-type: none"> - Plant protection measures against early blight, late blight and tomato fruit borer must be taken up if the crops are 35-40 days old at an interval of 7-10 days interval. - Proper fungicide and insecticides may be procured well in advance before widespread infestation in the crop. - Same measures may be followed for king chilli also. - Surrounding area of the polyhouse should be hygienic and clean to avoid pest and insects.

Animal Sciences

Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
Poultry/ Duckery	All susceptible age groups	Endoparasite	- Administer Albend @ 30 ml/100 birds in drinking water.
		Coccidiosis	- Administer <i>Amprolium Powder</i> @ 1g/lit of drinking water for 5 days.
		Ectoparasite	- Spray Butox @ 2ml in 1 lit of water, twice a week.
		Management	<ul style="list-style-type: none"> - Cover the wall with hessian cloth/ polysheet during night time. - Brooding house must be kept warm and avoid wet litter material. - Preventive dose of an antibiotic is suggested.
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.
Pig	Above 3 months of age	Swine Fever	- Vaccinate against swine fever after the age of 3 months.
		Coccidiosis	- Administer Piperazine liquid @ 10ml orally per adult once only.
		Ectoparasites	- Spray Butox @ 2ml in 1 lit of water, twice a week.
		Deworming	- Deworm using Albendazole @ 1ml/3kg body weight orally once only.
Cattle / Buffalo/ Mithun	Above 3 months of age	Paramphistomes	- Deworm with liquid Tolzan-F @ 30ml/kg body weight for lower altitudes.
		FMD	- Vaccinate against FMD.
		Ectoparasites	- Spray Butox @ 2ml in 1 lit of water, twice a week.

Fisheries

* There are moderate rains in forecast hence, encircle pond with happa net to avoid escape of fishes.

Type of Farming	Stage	Management	Agro-metrological advisories
Carp culture	Grow-out	Pond water	- If colour & odour of pond water changes then drain out half of the pond water and replace with fresh water. Ponds should be free from unwanted vegetation and insects and water depth should be maintained at 1.0-1.5m.
		Feeding	- Feeds should be provided 2 times a day.
Paddy cum fish culture	Fish harvesting		- As the paddy has reached maturity stage, fishes may be harvested.
Cat fish (Ngakra)	Pond and water		- Water depth should be maintained at 0.5m -0.8m for nurseries.
	Feed		- Feed with high protein content 35-40% CP should be given @ 3-5 % body weight.

SMS:

ICAR MNP: light to moderate rains upto Wednesday. Mature crops must be harvested before rains to minimize any loss. Procure spawn of Oyster mushroom. Poultry: Brooding house must be kept warm and avoid wet litter material.

I. Meghachandra Singh
Scientist i/c, IAAS



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MANIPUR BULLETIN

25th October, 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 26th to 30th October, 2013 as given below:

<p><u>Significant past weather for the preceding bi-weekly of Imphal - West (22nd to 24th October, 2013)</u></p> <p>During the past three days the sky was partly cloudy to cloudy but mainly clear during afternoon hours of 24 Oct. 16.3 mm rainfall was recorded during past four days. Maximum temperature range observed was 26.4 – 29.7 °C, range of minimum temperature observed was 16.6 – 19.0 °C, mean relative humidity observed in morning and afternoon were 94.3 % and 71.0 % respectively. The average wind speed range was 0.5 – 0.6 km/hr.</p>	<p><u>Weather forecast for next five days of Chandel (26th to 30th October, 2013)</u></p> <p>There may be light to moderate rains upto Wednesday. The sky may be partly cloudy to cloudy with maximum temp. of 26.0 - 29.0 °C and minimum temp. of 14.0 – 16.0 °C. RH may reach a maximum value of 100 % (maximum RH) & 92 % (minimum RH). The average wind speed may be 2-3 km/hr during next five days.</p>
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Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
Field Crops			
Rice	Maturity to harvesting		<ul style="list-style-type: none"> - Excess water must be drained out 10 days before harvesting. - Harvesting may be done, if 75-80 % of the spikelet is yellow in colour. - Panicles may be stacked for 5-7 days. Turn the heap of panicles regularly for better threshing. - After proper threshing, grains must be sundried well before storage.
Soybean	Harvesting and post-harvest		<ul style="list-style-type: none"> - Before rains, harvest when all the leaves are yellow. Stake in bundles under the sun or shade to dry. Thresh after 7-10 days of drying. Grain should be fully sundried to (10-12) % moisture.
Groundnut	Harvesting and post-harvest		<ul style="list-style-type: none"> - Mature crops may be harvested before rains. Harvested pods should be dried in sunlight for 3-4 days by spreading in a thin layer on a threshing floor.
Blackgram / rice bean	Pod formation	Hairy caterpillars	<ul style="list-style-type: none"> - Dichlorovos 76 EC 0.05% (10 ml/ 15 lit of water) on dry days. - Weeding may be done for proper utilization of nutrients and moisture by the crop.
Storage			<ul style="list-style-type: none"> - Clean and store the seeds in RC-seed bins after proper drying. Check for germination of seeds or fungal growth.
Horticulture Crops			
Land preparation may be carried after rains only when field conditions permits.			
Potato	Seed/ tuber treatment		<ul style="list-style-type: none"> - Collect seed tubers from reliable source and treated it with Sixer (Carbendazim + Mencozeb) @ 2 gm/lit of water for 20 minutes and dry in shed before planting as preventive measure against soil borne diseases.
Vegetable nursery (Cole Crops/ Tomato)	Nursery		<ul style="list-style-type: none"> - Prepare raised nursery bed (of 18-20 cm height) for cloe crops & tomato. - To avoid soil borne diseases, nursery bed must be dried properly. - Incorporate Captan 50 WP or Carbendazim before sowing.
Mushroom	Procurement of mushroom spawn		<ul style="list-style-type: none"> Oyster mushroom can be grown during this season (optimum temperature is 22.0 to 28.0 °C). Interested farmers may undergo skill oriented training on cultivation of Oyster mushroom. - 10 x 20 feet clean and sanitized room or shed is sufficient for beginning the cultivation.
Vegetable nursery (Cole Crops/ Tomato/ Garden pea, etc.)	Land preparation for direct sowing/ transplanting		<ul style="list-style-type: none"> - Incorporate Tricoderma harzianum @ 5-6 kg/ sangam at the time of final land preparation (about 4-5 days ahead of sowing/ transplanting). - Transplant 25-30 days old seedlings (4 leaves stage) of cole crops and tomato. - Treat garden pea seeds (variety like Arkel, Azad) with Bavistin @ 2.5 mg/ lit of water before sowing.



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Onion	Nursery		Provide temporary rain shelter and make proper drainage around the plot.
Off season vegetables under protected cultivation	Transplanted tomato or king chilli		<ul style="list-style-type: none"> - Plant protection measures against early blight, late blight and tomato fruit borer must be taken up if the crops are 35-40 days old at an interval of 7-10 days interval. - Proper fungicide and insecticides may be procured well in advance before widespread infestation in the crop. - Same measures may be followed for king chilli also. - Surrounding area of the polyhouse should be hygienic and clean to avoid pest and insects.

Animal Sciences

Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
Poultry/ Duckery	All susceptible age groups	Endoparasite	- Administer Albend @ 30 ml/100 birds in drinking water.
		Coccidiosis	- Administer <i>Amprolium Powder</i> @ 1g/lit of drinking water for 5 days.
		Ectoparasite	- Spray Butox @ 2ml in 1 lit of water, twice a week.
		Management	<ul style="list-style-type: none"> - Cover the wall with hessian cloth/ polysheet during night time. - Brooding house must be kept warm and avoid wet litter material. - Preventive dose of an antibiotic is suggested.
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.
Pig	Above 3 months of age	Swine Fever	- Vaccinate against swine fever after the age of 3 months.
		Coccidiosis	- Administer Piperazine liquid @ 10ml orally per adult once only.
		Ectoparasites	- Spray Butox @ 2ml in 1 lit of water, twice a week.
		Deworming	- Deworm using Albendazole @ 1ml/3kg body weight orally once only.
Cattle / Buffalo/ Mithun	Above 3 months of age	Paramphistomes	- Deworm with liquid Tolzan-F @ 30ml/kg body weight for lower altitudes.
		FMD	- Vaccinate against FMD.
		Ectoparasites	- Spray Butox @ 2ml in 1 lit of water, twice a week.

Fisheries

* There are moderate rains in forecast hence, encircle pond with happa net to avoid escape of fishes.

Type of Farming	Stage	Management	Agro-metrological advisories
Carp culture	Grow-out	Pond water	- If colour & odour of pond water changes then drain out half of the pond water and replace with fresh water. Ponds should be free from unwanted vegetation and insects and water depth should be maintained at 1.0-1.5m.
		Feeding	- Feeds should be provided 2 times a day.
Paddy cum fish culture	Fish harvesting		- As the paddy has reached maturity stage, fishes may be harvested.
Cat fish (Ngakra)	Pond and water		- Water depth should be maintained at 0.5m -0.8m for nurseries.
	Feed		- Feed with high protein content 35-40% CP should be given @ 3-5 % body weight.

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Churachandpur

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<p><u>Significant past weather for the preceding bi-weekly of Imphal - West (22nd to 24th October, 2013)</u></p> <p>During the past three days the sky was partly cloudy to cloudy but mainly clear during afternoon hours of 24 Oct. 16.3 mm rainfall was recorded during past four days. Maximum temperature range observed was 26.4 – 29.7 °C, range of minimum temperature observed was 16.6 – 19.0 °C, mean relative humidity observed in morning and afternoon were 94.3 % and 71.0 % respectively. The average wind speed range was 0.5 – 0.6 km/hr.</p>	<p><u>Weather forecast for next five days of Churachandpur (26th to 30th October, 2013)</u></p> <p>There may be light to moderate rains upto Wednesday. The sky may be partly cloudy to cloudy with maximum temp. of 26.0 - 28.0 °C and minimum temp. of 16.0 – 18.0 °C. RH may reach a maximum value of 100 % (maximum RH) & 95 % (minimum RH). The average wind speed may be 2-3 km/hr during next five days.</p>
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Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
Field Crops			
Rice	Maturity to harvesting		<ul style="list-style-type: none"> - Excess water must be drained out 10 days before harvesting. - Harvesting may be done, if 75-80 % of the spikelet is yellow in colour. - Panicles may be stacked for 5-7 days. Turn the heap of panicles regularly for better threshing. - After proper threshing, grains must be sundried well before storage.
Soybean	Harvesting and post-harvest		<ul style="list-style-type: none"> - Before rains, harvest when all the leaves are yellow. Stake in bundles under the sun or shade to dry. Thresh after 7-10 days of drying. Grain should be fully sundried to (10-12) % moisture.
Groundnut	Harvesting and post-harvest		<ul style="list-style-type: none"> - Mature crops may be harvested before rains. Harvested pods should be dried in sunlight for 3-4 days by spreading in a thin layer on a threshing floor.
Blackgram / rice bean	Pod formation	Hairy caterpillars	<ul style="list-style-type: none"> - Dichlorovos 76 EC 0.05% (10 ml/ 15 lit of water) on dry days. - Weeding may be done for proper utilization of nutrients and moisture by the crop.
Storage			<ul style="list-style-type: none"> - Clean and store the seeds in RC-seed bins after proper drying. Check for germination of seeds or fungal growth.
Horticulture Crops			
Land preparation may be carried after rains only when field conditions permits.			
Potato	Seed/ tuber treatment		<ul style="list-style-type: none"> - Collect seed tubers from reliable source and treated it with Sixer (Carbendazim + Mencozeb) @ 2 gm/lit of water for 20 minutes and dry in shed before planting as preventive measure against soil borne diseases.
Vegetable nursery (Cole Crops/ Tomato)	Nursery		<ul style="list-style-type: none"> - Prepare raised nursery bed (of 18-20 cm height) for cloe crops & tomato. - To avoid soil borne diseases, nursery bed must be dried properly. - Incorporate Captan 50 WP or Carbendazim before sowing.
Mushroom	Procurement of mushroom spawn		<ul style="list-style-type: none"> Oyster mushroom can be grown during this season (optimum temperature is 22.0 to 28.0 °C). Interested farmers may undergo skill oriented training on cultivation of Oyster mushroom. - 10 x 20 feet clean and sanitized room or shed is sufficient for beginning the cultivation.
Vegetable nursery (Cole Crops/ Tomato/ Garden pea, etc.)	Land preparation for direct sowing/ transplanting		<ul style="list-style-type: none"> - Incorporate Tricoderma harzianum @ 5-6 kg/ sangam at the time of final land preparation (about 4-5 days ahead of sowing/ transplanting). - Transplant 25-30 days old seedlings (4 leaves stage) of cole crops and tomato. - Treat garden pea seeds (variety like Arkel, Azad) with Bavistin @ 2.5 mg/ lit of water before sowing.



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“Integrated Agromet Advisory Services”

Onion	Nursery		Provide temporary rain shelter and make proper drainage around the plot.
Off season vegetables under protected cultivation	Transplanted tomato or king chilli		<ul style="list-style-type: none"> - Plant protection measures against early blight, late blight and tomato fruit borer must be taken up if the crops are 35-40 days old at an interval of 7-10 days interval. - Proper fungicide and insecticides may be procured well in advance before widespread infestation in the crop. - Same measures may be followed for king chilli also. - Surrounding area of the polyhouse should be hygienic and clean to avoid pest and insects.

Animal Sciences

Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
Poultry/ Duckery	All susceptible age groups	Endoparasite	- Administer Albend @ 30 ml/100 birds in drinking water.
		Coccidiosis	- Administer <i>Amprolium Powder</i> @ 1g/lit of drinking water for 5 days.
		Ectoparasite	- Spray Butox @ 2ml in 1 lit of water, twice a week.
		Management	<ul style="list-style-type: none"> - Cover the wall with hessian cloth/ polysheet during night time. - Brooding house must be kept warm and avoid wet litter material. - Preventive dose of an antibiotic is suggested.
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.
Pig	Above 3 months of age	Swine Fever	- Vaccinate against swine fever after the age of 3 months.
		Coccidiosis	- Administer Piperazine liquid @ 10ml orally per adult once only.
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Fisheries

* There are moderate rains in forecast hence, encircle pond with happa net to avoid escape of fishes.

Type of Farming	Stage	Management	Agro-metrological advisories
Carp culture	Grow-out	Pond water	- If colour & odour of pond water changes then drain out half of the pond water and replace with fresh water. Ponds should be free from unwanted vegetation and insects and water depth should be maintained at 1.0-1.5m.
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SMS:

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Scientist i/c, IAAS



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“Integrated Agromet Advisory Services”

MANIPUR BULLETIN

25th October, 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 26th to 30th October, 2013 as given below:

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Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
Field Crops			
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Animal Sciences

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Pig	Above 3 months of age	Swine Fever	- Vaccinate against swine fever after the age of 3 months.
		Coccidiosis	- Administer Piperazine liquid @ 10ml orally per adult once only.
		Ectoparasites	- Spray Butox @ 2ml in 1 lit of water, twice a week.
		Deworming	- Deworm using Albendazole @ 1ml/3kg body weight orally once only.
Cattle / Buffalo/ Mithun	Above 3 months of age	Paramphistomes	- Deworm with liquid Tolzan-F @ 30ml/kg body weight for lower altitudes.
		FMD	- Vaccinate against FMD.
		Ectoparasites	- Spray Butox @ 2ml in 1 lit of water, twice a week.

Fisheries

* There are moderate rains in forecast hence, encircle pond with happa net to avoid escape of fishes.

Type of Farming	Stage	Management	Agro-metrological advisories
Carp culture	Grow-out	Pond water	- If colour & odour of pond water changes then drain out half of the pond water and replace with fresh water. Ponds should be free from unwanted vegetation and insects and water depth should be maintained at 1.0-1.5m.
		Feeding	- Feeds should be provided 2 times a day.
Paddy cum fish culture	Fish harvesting		- As the paddy has reached maturity stage, fishes may be harvested.
Cat fish (Ngakra)	Pond and water		- Water depth should be maintained at 0.5m -0.8m for nurseries.
	Feed		- Feed with high protein content 35-40% CP should be given @ 3-5 % body weight.

SMS:

ICAR MNP: light to moderate rains upto Wednesday. Mature crops must be harvested before rains to minimize any loss. Procure spawn of Oyster mushroom. Poultry: Brooding house must be kept warm and avoid wet litter material.

I. Meghachandra Singh
Scientist i/c, IAAS



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



“Integrated Agromet Advisory Services”

MANIPUR BULLETIN

25th October, 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 26th to 30th October, 2013 as given below:

<p><u>Significant past weather for the preceding bi-weekly of Imphal - West (22nd to 24th October, 2013)</u></p> <p>During the past three days the sky was partly cloudy to cloudy but mainly clear during afternoon hours of 24 Oct. 16.3 mm rainfall was recorded during past four days. Maximum temperature range observed was 26.4 – 29.7 °C, range of minimum temperature observed was 16.6 – 19.0 °C, mean relative humidity observed in morning and afternoon were 94.3 % and 71.0 % respectively. The average wind speed range was 0.5 – 0.6 km/hr.</p>	<p><u>Weather forecast for next five days of Imphal - West (26th to 30th October, 2013)</u></p> <p>There may be light to moderate rains upto Wednesday. The sky may be partly cloudy to cloudy with maximum temp. of 26.0 - 28.0 °C and minimum temp. of 15.0 – 17.0 °C. RH may reach a maximum value of 100 % (maximum RH) & 83 % (minimum RH). The average wind speed may be 2-4 km/hr during next five days.</p>
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Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
Field Crops			
Rice	Maturity to harvesting		<ul style="list-style-type: none"> - Drain out excess water 10 days before harvesting. - Harvesting may be done, if 75-80 % of the spikelet is yellow in colour. - Panicles may be stacked for 5-7 days. Turn the heap of panicles regularly for better threshing. - After proper threshing, grains must be sundried well before storage.
Soybean	Harvesting and post-harvest		<ul style="list-style-type: none"> - Before rains, harvest when all the leaves are yellow. Stake in bundles under the sun or shade to dry. Thresh after 7-10 days of drying. Grain should be fully sundried to (10-12) % moisture.
Groundnut	Harvesting and post-harvest		<ul style="list-style-type: none"> - Mature crops may be harvested before rains. Harvested pods should be dried in sunlight for 3-4 days by spreading in a thin layer on a threshing floor.
Blackgram / rice bean	Pod formation	Hairy caterpillars	<ul style="list-style-type: none"> - Dichlorovos 76 EC 0.05% (10 ml/ 15 lit of water) on dry days. - Weeding may be done for proper utilization of nutrients and moisture by the crop.
Storage			<ul style="list-style-type: none"> - Clean and store the seeds in RC-seed bins after proper drying. Check for germination of seeds or fungal growth.
Horticulture Crops			
Land preparation may be carried after rains only when field conditions permits.			
Potato	Seed/ tuber treatment		<ul style="list-style-type: none"> - Collect seed tubers from reliable source and treated it with Sixer (Carbendazim + Mencozeb) @ 2 gm/lit of water for 20 minutes and dry in shed before planting as preventive measure against soil borne diseases.
Vegetable nursery (Cole Crops/ Tomato)	Nursery		<ul style="list-style-type: none"> - Prepare raised nursery bed (of 18-20 cm height) for cloe crops & tomato. - To avoid soil borne diseases, nursery bed must be dried properly. - Incorporate Captan 50 WP or Carbendazim before sowing.
Mushroom	Procurement of mushroom spawn		<p>Oyster mushroom can be grown during this season (optimum temperature is 22.0 to 28.0 °C). Interested farmers may undergo skill oriented training on cultivation of Oyster mushroom.</p> <ul style="list-style-type: none"> - 10 x 20 feet clean and sanitized room or shed is sufficient for beginning the cultivation.
Vegetable nursery (Cole Crops/ Tomato/ Garden pea, etc.)	Land preparation for direct sowing/ transplanting		<ul style="list-style-type: none"> - Incorporate Tricoderma harzianum @ 5-6 kg/ sangam at the time of final land preparation (about 4-5 days ahead of sowing/ transplanting). - Transplant 25-30 days old seedlings (4 leaves stage) of cole crops and tomato. - Treat garden pea seeds (variety like Arkel, Azad) with Bavistin @ 2.5 mg/ lit of water before sowing.



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“Integrated Agromet Advisory Services”

Onion	Nursery		Provide temporary rain shelter and make proper drainage around the plot.
Off season vegetables under protected cultivation	Transplanted tomato or king chilli		<ul style="list-style-type: none"> - Plant protection measures against early blight, late blight and tomato fruit borer must be taken up if the crops are 35-40 days old at an interval of 7-10 days interval. - Proper fungicide and insecticides may be procured well in advance before widespread infestation in the crop. - Same measures may be followed for king chilli also. - Surrounding area of the polyhouse should be hygienic and clean to avoid pest and insects.

Animal Sciences

Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
Poultry/ Duckery	All susceptible age groups	Endoparasite	- Administer Albend @ 30 ml/100 birds in drinking water.
		Coccidiosis	- Administer <i>Amprolium Powder</i> @ 1g/lit of drinking water for 5 days.
		Ectoparasite	- Spray Butox @ 2ml in 1 lit of water, twice a week.
		Management	<ul style="list-style-type: none"> - Cover the wall with hessian cloth/ polysheet during night time. - Brooding house must be kept warm and avoid wet litter material. - Preventive dose of an antibiotic is suggested.
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.
Pig	Above 3 months of age	Swine Fever	- Vaccinate against swine fever after the age of 3 months.
		Coccidiosis	- Administer Piperazine liquid @ 10ml orally per adult once only.
		Ectoparasites	- Spray Butox @ 2ml in 1 lit of water, twice a week.
		Deworming	- Deworm using Albendazole @ 1ml/3kg body weight orally once only.
Cattle / Buffalo/ Mithun	Above 3 months of age	Paramphistomes	- Deworm with liquid Tolzan-F @ 30ml/kg body weight for lower altitudes.
		FMD	- Vaccinate against FMD.
		Ectoparasites	- Spray Butox @ 2ml in 1 lit of water, twice a week.

Fisheries

* There are moderate rains in forecast hence, encircle pond with happa net to avoid escape of fishes.

Type of Farming	Stage	Management	Agro-metrological advisories
Carp culture	Grow-out	Pond water	- If colour & odour of pond water changes then drain out half of the pond water and replace with fresh water. Ponds should be free from unwanted vegetation and insects and water depth should be maintained at 1.0-1.5m.
		Feeding	- Feeds should be provided 2 times a day.
Paddy cum fish culture	Fish harvesting		- As the paddy has reached maturity stage, fishes may be harvested.
Cat fish (Ngakra)	Pond and water		- Water depth should be maintained at 0.5m -0.8m for nurseries.
	Feed		- Feed with high protein content 35-40% CP should be given @ 3-5 % body weight.

SMS:

ICAR MNP: light to moderate rains upto Wednesday. Mature crops must be harvested before rains to minimize any loss. Procure spawn of Oyster mushroom. Poultry: Brooding house must be kept warm and avoid wet litter material.

I. Meghachandra Singh
Scientist i/c, IAAS



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



“Integrated Agromet Advisory Services”

MANIPUR BULLETIN

25th October, 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 26th to 30th October, 2013 as given below:

<p><u>Significant past weather for the preceding bi-weekly of Imphal - West (22nd to 24th October, 2013)</u></p> <p>During the past three days the sky was partly cloudy to cloudy but mainly clear during afternoon hours of 24 Oct. 16.3 mm rainfall was recorded during past four days. Maximum temperature range observed was 26.4 – 29.7 °C, range of minimum temperature observed was 16.6 – 19.0 °C, mean relative humidity observed in morning and afternoon were 94.3 % and 71.0 % respectively. The average wind speed range was 0.5 – 0.6 km/hr.</p>	<p><u>Weather forecast for next five days of Senapati (26th to 30th October, 2013)</u></p> <p>There may be light to moderate rains upto Wednesday. The sky may be partly cloudy to cloudy with maximum temp. of 23.0 - 26.0 °C and minimum temp. of 12.0 – 15.0 °C. RH may reach a maximum value of 100 % (maximum RH) & 73 % (minimum RH). The average wind speed may be 2-4 km/hr during next five days.</p>
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Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
Field Crops			
Rice	Maturity to harvesting		<ul style="list-style-type: none"> - Excess water must be drained out 10 days before harvesting. - Harvesting may be done, if 75-80 % of the spikelet is yellow in colour. - Panicles may be stacked for 5-7 days. Turn the heap of panicles regularly for better threshing. - After proper threshing, grains must be sundried well before storage.
Soybean	Harvesting and post-harvest		<ul style="list-style-type: none"> - Before rains, harvest when all the leaves are yellow. Stake in bundles under the sun or shade to dry. Thresh after 7-10 days of drying. Grain should be fully sundried to (10-12) % moisture.
Groundnut	Harvesting and post-harvest		<ul style="list-style-type: none"> - Mature crops may be harvested before rains. Harvested pods should be dried in sunlight for 3-4 days by spreading in a thin layer on a threshing floor.
Blackgram / rice bean	Pod formation	Hairy caterpillars	<ul style="list-style-type: none"> - Dichlorovos 76 EC 0.05% (10 ml/ 15 lit of water) on dry days. - Weeding may be done for proper utilization of nutrients and moisture by the crop.
Storage			<ul style="list-style-type: none"> - Clean and store the seeds in RC-seed bins after proper drying. Check for germination of seeds or fungal growth.
Horticulture Crops			
Land preparation may be carried after rains only when field conditions permits.			
Vegetable nursery (Cole Crops/ Tomato)	Nursery		<ul style="list-style-type: none"> - Prepare raised nursery bed (of 18-20 cm height) for cloe crops & tomato. - To avoid soil borne diseases, nursery bed must be dried properly. - Incorporate Captan 50 WP or Carbendazim before sowing.
Mushroom	Procurement of mushroom spawn		<p>Oyster mushroom can be grown during this season (optimum temperature is 22.0 to 28.0 °C). Interested farmers may undergo skill oriented training on cultivation of Oyster mushroom.</p> <ul style="list-style-type: none"> - 10 x 20 feet clean and sanitized room or shed is sufficient for beginning the cultivation.
Vegetable nursery (Cole Crops/ Tomato/ Garden pea, etc.)	Land preparation for direct sowing/ transplanting		<ul style="list-style-type: none"> - Incorporate Tricoderma harzianum @ 5-6 kg/ sangam at the time of final land preparation (about 4-5 days ahead of sowing/ transplanting). - Transplant 25-30 days old seedlings (4 leaves stage) of cole crops and tomato. - Treat garden pea seeds (variety like Arkel, Azad) with Bavistin @ 2.5 mg/ lit of water before sowing.
Onion	Nursery		<ul style="list-style-type: none"> - Provide temporary rain shelter and make proper drainage around the plot.
Off season vegetables	Transplanted tomato or king		<ul style="list-style-type: none"> - Plant protection measures against early blight, late blight and tomato fruit borer must be taken up if the crops are 35-40 days old at an interval



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under protected cultivation	chilli		of 7-10 days interval. - Proper fungicide and insecticides may be procured well in advance before widespread infestation in the crop. - Same measures may be followed for king chilli also. - Surrounding area of the polyhouse should be hygienic and clean to avoid pest and insects.
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Animal Sciences

Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
Poultry/ Duckery	All susceptible age groups	Endoparasite	- Administer Albend @ 30 ml/100 birds in drinking water.
		Coccidiosis	- Administer <i>Amprolium Powder</i> @ 1g/lit of drinking water for 5 days.
		Ectoparasite	- Spray Butox @ 2ml in 1 lit of water, twice a week.
		Management	- Cover the wall with hessian cloth/ polysheet during night time. - Brooding house must be kept warm and avoid wet litter material. - Preventive dose of an antibiotic is suggested.
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.
Pig	Above 3 months of age	Swine Fever	- Vaccinate against swine fever after the age of 3 months.
		Coccidiosis	- Administer Piperazine liquid @ 10ml orally per adult once only.
		Ectoparasites	- Spray Butox @ 2ml in 1 lit of water, twice a week.
		Deworming	- Deworm using Albendazole @ 1ml/3kg body weight orally once only.
Cattle / Buffalo/ Mithun	Above 3 months of age	Paramphistomes	- Deworm with liquid Tolzan-F @ 30ml/kg body weight for lower altitudes.
		FMD	- Vaccinate against FMD.
		Ectoparasites	- Spray Butox @ 2ml in 1 lit of water, twice a week.

Fisheries

* There are moderate rains in forecast hence, encircle pond with happa net to avoid escape of fishes.

Type of Farming	Stage	Management	Agro-metrological advisories
Carp culture	Grow-out	Pond water	- If colour & odour of pond water changes then drain out half of the pond water and replace with fresh water. Ponds should be free from unwanted vegetation and insects and water depth should be maintained at 1.0-1.5m.
		Feeding	- Feeds should be provided 2 times a day.
Paddy cum fish culture	Fish harvesting		- As the paddy has reached maturity stage, fishes may be harvested.
Cat fish (Ngakra)	Pond and water		- Water depth should be maintained at 0.5m -0.8m for nurseries.
	Feed		- Feed with high protein content 35-40% CP should be given @ 3-5 % body weight.

SMS:

ICAR MNP: light to moderate rains upto Wednesday. Mature crops must be harvested before rains to minimize any loss.

Procure spawn of Oyster mushroom. Poultry: Brooding house must be kept warm and avoid wet litter material.

I. Meghachandra Singh
Scientist i/c, IAAS



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Manipur Centre, Lamphelpat, Imphal - 795 004**



“Integrated Agromet Advisory Services”

MANIPUR BULLETIN

25th October, 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 26th to 30th October, 2013 as given below:

<p><u>Significant past weather for the preceding bi-weekly of Imphal - West (22nd to 24th October, 2013)</u></p> <p>During the past three days the sky was partly cloudy to cloudy but mainly clear during afternoon hours of 24 Oct. 16.3 mm rainfall was recorded during past four days. Maximum temperature range observed was 26.4 – 29.7 °C, range of minimum temperature observed was 16.6 – 19.0 °C, mean relative humidity observed in morning and afternoon were 94.3 % and 71.0 % respectively. The average wind speed range was 0.5 – 0.6 km/hr.</p>	<p><u>Weather forecast for next five days of Tamenglong (26th to 30th October, 2013)</u></p> <p>There may be light to moderate rains upto Wednesday. The sky may be partly cloudy to cloudy with maximum temp. of 27.0 - 29.0 °C and minimum temp. of 16.0 – 18.0 °C. RH may reach a maximum value of 100 % (maximum RH) & 89 % (minimum RH). The average wind speed may be 2-4 km/hr during next five days.</p>
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Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
Field Crops			
Rice	Maturity to harvesting		<ul style="list-style-type: none"> - Excess water must be drained out 10 days before harvesting. - Harvesting may be done, if 75-80 % of the spikelet is yellow in colour. - Panicles may be stacked for 5-7 days. Turn the heap of panicles regularly for better threshing. - After proper threshing, grains must be sundried well before storage.
Soybean	Harvesting and post-harvest		<ul style="list-style-type: none"> - Before rains, harvest when all the leaves are yellow. Stake in bundles under the sun or shade to dry. Thresh after 7-10 days of drying. Grain should be fully sundried to (10-12) % moisture.
Groundnut	Harvesting and post-harvest		<ul style="list-style-type: none"> - Mature crops may be harvested before rains. Harvested pods should be dried in sunlight for 3-4 days by spreading in a thin layer on a threshing floor.
Blackgram / rice bean	Pod formation	Hairy caterpillars	<ul style="list-style-type: none"> - Dichlorovos 76 EC 0.05% (10 ml/ 15 lit of water) on dry days. - Weeding may be done for proper utilization of nutrients and moisture by the crop.
Storage			<ul style="list-style-type: none"> - Clean and store the seeds in RC-seed bins after proper drying. Check for germination of seeds or fungal growth.
Horticulture Crops			
Land preparation may be carried after rains only when field conditions permits.			
Potato	Seed/ tuber treatment		<ul style="list-style-type: none"> - Collect seed tubers from reliable source and treated it with Sixer (Carbendazim + Mencozeb) @ 2 gm/lit of water for 20 minutes and dry in shed before planting as preventive measure against soil borne diseases.
Vegetable nursery (Cole Crops/ Tomato)	Nursery		<ul style="list-style-type: none"> - Prepare raised nursery bed (of 18-20 cm height) for cloe crops & tomato. - To avoid soil borne diseases, nursery bed must be dried properly. - Incorporate Captan 50 WP or Carbendazim before sowing.
Mushroom	Procurement of mushroom spawn		<ul style="list-style-type: none"> Oyster mushroom can be grown during this season (optimum temperature is 22.0 to 28.0 °C). Interested farmers may undergo skill oriented training on cultivation of Oyster mushroom. - 10 x 20 feet clean and sanitized room or shed is sufficient for beginning the cultivation.
Vegetable nursery (Cole Crops/ Tomato/ Garden pea, etc.)	Land preparation for direct sowing/ transplanting		<ul style="list-style-type: none"> - Incorporate Tricoderma harzianum @ 5-6 kg/ sangam at the time of final land preparation (about 4-5 days ahead of sowing/ transplanting). - Transplant 25-30 days old seedlings (4 leaves stage) of cole crops and tomato. - Treat garden pea seeds (variety like Arkel, Azad) with Bavistin @ 2.5 mg/ lit of water before sowing.



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Onion	Nursery		Provide temporary rain shelter and make proper drainage around the plot.
Off season vegetables under protected cultivation	Transplanted tomato or king chilli		<ul style="list-style-type: none"> - Plant protection measures against early blight, late blight and tomato fruit borer must be taken up if the crops are 35-40 days old at an interval of 7-10 days interval. - Proper fungicide and insecticides may be procured well in advance before widespread infestation in the crop. - Same measures may be followed for king chilli also. - Surrounding area of the polyhouse should be hygienic and clean to avoid pest and insects.

Animal Sciences

Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
Poultry/ Duckery	All susceptible age groups	Endoparasite	- Administer Albend @ 30 ml/100 birds in drinking water.
		Coccidiosis	- Administer <i>Amprolium Powder</i> @ 1g/lit of drinking water for 5 days.
		Ectoparasite	- Spray Butox @ 2ml in 1 lit of water, twice a week.
		Management	<ul style="list-style-type: none"> - Cover the wall with hessian cloth/ polysheet during night time. - Brooding house must be kept warm and avoid wet litter material. - Preventive dose of an antibiotic is suggested.
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.
Pig	Above 3 months of age	Swine Fever	- Vaccinate against swine fever after the age of 3 months.
		Coccidiosis	- Administer Piperazine liquid @ 10ml orally per adult once only.
		Ectoparasites	- Spray Butox @ 2ml in 1 lit of water, twice a week.
		Deworming	- Deworm using Albendazole @ 1ml/3kg body weight orally once only.
Cattle / Buffalo/ Mithun	Above 3 months of age	Paramphistomes	- Deworm with liquid Tolzan-F @ 30ml/kg body weight for lower altitudes.
		FMD	- Vaccinate against FMD.
		Ectoparasites	- Spray Butox @ 2ml in 1 lit of water, twice a week.

Fisheries

* There are moderate rains in forecast hence, encircle pond with happa net to avoid escape of fishes.

Type of Farming	Stage	Management	Agro-metrological advisories
Carp culture	Grow-out	Pond water	- If colour & odour of pond water changes then drain out half of the pond water and replace with fresh water. Ponds should be free from unwanted vegetation and insects and water depth should be maintained at 1.0-1.5m.
		Feeding	- Feeds should be provided 2 times a day.
Paddy cum fish culture	Fish harvesting		- As the paddy has reached maturity stage, fishes may be harvested.
Cat fish (Ngakra)	Pond and water		- Water depth should be maintained at 0.5m -0.8m for nurseries.
	Feed		- Feed with high protein content 35-40% CP should be given @ 3-5 % body weight.

SMS:

ICAR MNP: light to moderate rains upto Wednesday. Mature crops must be harvested before rains to minimize any loss. Procure spawn of Oyster mushroom. Poultry: Brooding house must be kept warm and avoid wet litter material.

I. Meghachandra Singh
Scientist i/c, IAAS



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



“Integrated Agromet Advisory Services”

MANIPUR BULLETIN

25th October, 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 26th to 30th October, 2013 as given below:

<p><u>Significant past weather for the preceding bi-weekly of Imphal - West (22nd to 24th October, 2013)</u></p> <p>During the past three days the sky was partly cloudy to cloudy but mainly clear during afternoon hours of 24 Oct. 16.3 mm rainfall was recorded during past four days. Maximum temperature range observed was 26.4 – 29.7 °C, range of minimum temperature observed was 16.6 – 19.0 °C, mean relative humidity observed in morning and afternoon were 94.3 % and 71.0 % respectively. The average wind speed range was 0.5 – 0.6 km/hr.</p>	<p><u>Weather forecast for next five days of Thoubal (26th to 30th October, 2013)</u></p> <p>There may be light to moderate rains upto Wednesday. The sky may be partly cloudy to cloudy with maximum temp. of 25.0 - 27.0 °C and minimum temp. of 14.0 – 16.0 °C. RH may reach a maximum value of 100 % (maximum RH) & 88 % (minimum RH). The average wind speed may be 2 km/hr during next five days.</p>
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Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
Field Crops			
Rice	Maturity to harvesting		<ul style="list-style-type: none"> - Drain out excess water 10 days before harvesting. - Harvesting may be done, if 75-80 % of the spikelet is yellow in colour. - Panicles may be stacked for 5-7 days. Turn the heap of panicles regularly for better threshing. - After proper threshing, grains must be sundried well before storage.
Soybean	Harvesting and post-harvest		<ul style="list-style-type: none"> - Before rains, harvest when all the leaves are yellow. Stake in bundles under the sun or shade to dry. Thresh after 7-10 days of drying. Grain should be fully sundried to (10-12) % moisture.
Groundnut	Harvesting and post-harvest		<ul style="list-style-type: none"> - Mature crops may be harvested before rains. Harvested pods should be dried in sunlight for 3-4 days by spreading in a thin layer on a threshing floor.
Blackgram / rice bean	Pod formation	Hairy caterpillars	<ul style="list-style-type: none"> - Dichlorovos 76 EC 0.05% (10 ml/ 15 lit of water) on dry days. - Weeding may be done for proper utilization of nutrients and moisture by the crop.
Storage			<ul style="list-style-type: none"> - Clean and store the seeds in RC-seed bins after proper drying. Check for germination of seeds or fungal growth.
Horticulture Crops			
Land preparation may be carried after rains only when field conditions permits.			
Potato	Seed/ tuber treatment		<ul style="list-style-type: none"> - Collect seed tubers from reliable source and treated it with Sixer (Carbendazim + Mencozeb) @ 2 gm/lit of water for 20 minutes and dry in shed before planting as preventive measure against soil borne diseases.
Vegetable nursery (Cole Crops/ Tomato)	Nursery		<ul style="list-style-type: none"> - Prepare raised nursery bed (of 18-20 cm height) for cloe crops & tomato. - To avoid soil borne diseases, nursery bed must be dried properly. - Incorporate Captan 50 WP or Carbendazim before sowing.
Mushroom	Procurement of mushroom spawn		<ul style="list-style-type: none"> Oyster mushroom can be grown during this season (optimum temperature is 22.0 to 28.0 °C). Interested farmers may undergo skill oriented training on cultivation of Oyster mushroom. - 10 x 20 feet clean and sanitized room or shed is sufficient for beginning the cultivation.
Vegetable nursery (Cole Crops/ Tomato/ Garden pea, etc.)	Land preparation for direct sowing/ transplanting		<ul style="list-style-type: none"> - Incorporate Tricoderma harzianum @ 5-6 kg/ sangam at the time of final land preparation (about 4-5 days ahead of sowing/ transplanting). - Transplant 25-30 days old seedlings (4 leaves stage) of cole crops and tomato. - Treat garden pea seeds (variety like Arkel, Azad) with Bavistin @ 2.5 mg/ lit of water before sowing.



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“Integrated Agromet Advisory Services”

Onion	Nursery		Provide temporary rain shelter and make proper drainage around the plot.
Off season vegetables under protected cultivation	Transplanted tomato or king chilli		<ul style="list-style-type: none"> - Plant protection measures against early blight, late blight and tomato fruit borer must be taken up if the crops are 35-40 days old at an interval of 7-10 days interval. - Proper fungicide and insecticides may be procured well in advance before widespread infestation in the crop. - Same measures may be followed for king chilli also. - Surrounding area of the polyhouse should be hygienic and clean to avoid pest and insects.

Animal Sciences

Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
Poultry/ Duckery	All susceptible age groups	Endoparasite	- Administer Albend @ 30 ml/100 birds in drinking water.
		Coccidiosis	- Administer <i>Amprolium Powder</i> @ 1g/lit of drinking water for 5 days.
		Ectoparasite	- Spray Butox @ 2ml in 1 lit of water, twice a week.
		Management	<ul style="list-style-type: none"> - Cover the wall with hessian cloth/ polysheet during night time. - Brooding house must be kept warm and avoid wet litter material. - Preventive dose of an antibiotic is suggested.
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.
Pig	Above 3 months of age	Swine Fever	- Vaccinate against swine fever after the age of 3 months.
		Coccidiosis	- Administer Piperazine liquid @ 10ml orally per adult once only.
		Ectoparasites	- Spray Butox @ 2ml in 1 lit of water, twice a week.
		Deworming	- Deworm using Albendazole @ 1ml/3kgbody weight orally once only.
Cattle / Buffalo/ Mithun	Above 3 months of age	Paramphistomes	- Deworm with liquid Tolzan-F @ 30ml/kg body weight for lower altitudes.
		FMD	- Vaccinate against FMD.
		Ectoparasites	- Spray Butox @ 2ml in 1 lit of water, twice a week.

Fisheries

* There are moderate rains in forecast hence, encircle pond with happa net to avoid escape of fishes.

Type of Farming	Stage	Management	Agro-metrological advisories
Carp culture	Grow-out	Pond water	- If colour & odour of pond water changes then drain out half of the pond water and replace with fresh water. Ponds should be free from unwanted vegetation and insects and water depth should be maintained at 1.0-1.5m.
		Feeding	- Feeds should be provided 2 times a day.
Paddy cum fish culture	Fish harvesting		- As the paddy has reached maturity stage, fishes may be harvested.
Cat fish (Ngakra)	Pond and water		- Water depth should be maintained at 0.5m -0.8m for nurseries.
	Feed		- Feed with high protein content 35-40% CP should be given @ 3-5 % body weight.

SMS:

ICAR MNP: light to moderate rains upto Wednesday. Mature crops must be harvested before rains to minimize any loss. Procure spawn of Oyster mushroom. Poultry: Brooding house must be kept warm and avoid wet litter material.

I. Meghachandra Singh
Scientist i/c, IAAS



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



“Integrated Agromet Advisory Services”

MANIPUR BULLETIN

25th October, 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 26th to 30th October, 2013 as given below:

<p><u>Significant past weather for the preceding bi-weekly of Imphal - West (22nd to 24th October, 2013)</u></p> <p>During the past three days the sky was partly cloudy to cloudy but mainly clear during afternoon hours of 24 Oct. 16.3 mm rainfall was recorded during past four days. Maximum temperature range observed was 26.4 – 29.7 °C, range of minimum temperature observed was 16.6 – 19.0 °C, mean relative humidity observed in morning and afternoon were 94.3 % and 71.0 % respectively. The average wind speed range was 0.5 – 0.6 km/hr.</p>	<p><u>Weather forecast for next five days of Ukhrul (26th to 30th October, 2013)</u></p> <p>There may be light to moderate rains upto Wednesday. The sky may be partly cloudy to cloudy with maximum temp. of 21.0 - 24.0 °C and minimum temp. of 10.0 – 13.0 °C. RH may reach a maximum value of 100 % (maximum RH) & 83 % (minimum RH). The average wind speed may be 2-3 km/hr during next five days.</p>
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Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
Field Crops			
Rice	Maturity to harvesting		<ul style="list-style-type: none"> - Excess water must be drained out 10 days before harvesting. - Harvesting may be done, if 75-80 % of the spikelet is yellow in colour. - Panicles may be stacked for 5-7 days. Turn the heap of panicles regularly for better threshing. - After proper threshing, grains must be sundried well before storage.
Soybean	Harvesting and post-harvest		<ul style="list-style-type: none"> - Before rains, harvest when all the leaves are yellow. Stake in bundles under the sun or shade to dry. Thresh after 7-10 days of drying. Grain should be fully sundried to (10-12) % moisture.
Groundnut	Harvesting and post-harvest		<ul style="list-style-type: none"> - Mature crops may be harvested before rains. Harvested pods should be dried in sunlight for 3-4 days by spreading in a thin layer on a threshing floor.
Blackgram / rice bean	Pod formation	Hairy caterpillars	<ul style="list-style-type: none"> - Dichlorovos 76 EC 0.05% (10 ml/ 15 lit of water) on dry days. - Weeding may be done for proper utilization of nutrients and moisture by the crop.
Storage			<ul style="list-style-type: none"> - Clean and store the seeds in RC-seed bins after proper drying. Check for germination of seeds or fungal growth.
Horticulture Crops			
Land preparation may be carried after rains only when field conditions permits.			
Vegetable nursery (Cole Crops/ Tomato)	Nursery		<ul style="list-style-type: none"> - Prepare raised nursery bed (of 18-20 cm height) for cloe crops & tomato. - To avoid soil borne diseases, nursery bed must be dried properly. - Incorporate Captan 50 WP or Carbendazim before sowing.
Mushroom	Procurement of mushroom spawn		<p>Oyster mushroom can be grown during this season (optimum temperature is 22.0 to 28.0 °C). Interested farmers may undergo skill oriented training on cultivation of Oyster mushroom.</p> <ul style="list-style-type: none"> - 10 x 20 feet clean and sanitized room or shed is sufficient for beginning the cultivation.
Vegetable nursery (Cole Crops/ Tomato/ Garden pea, etc.)	Land preparation for direct sowing/ transplanting		<ul style="list-style-type: none"> - Incorporate Tricoderma harzianum @ 5-6 kg/ sangam at the time of final land preparation (about 4-5 days ahead of sowing/ transplanting). - Transplant 25-30 days old seedlings (4 leaves stage) of cole crops and tomato. - Treat garden pea seeds (variety like Arkel, Azad) with Bavistin @ 2.5 mg/ lit of water before sowing.
Onion	Nursery		<ul style="list-style-type: none"> - Provide temporary rain shelter and make proper drainage around the plot.
Off season vegetables	Transplanted tomato or king		<ul style="list-style-type: none"> - Plant protection measures against early blight, late blight and tomato fruit borer must be taken up if the crops are 35-40 days old at an interval



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under protected cultivation	chilli		of 7-10 days interval. - Proper fungicide and insecticides may be procured well in advance before widespread infestation in the crop. - Same measures may be followed for king chilli also. - Surrounding area of the polyhouse should be hygienic and clean to avoid pest and insects.
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