



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



**“Integrated Agromet Advisory Services”**

**MANIPUR BULLETIN**

**19<sup>th</sup> August, 2014**

**Imphal-East**

IAAS, ICAR-RC Manipur Centre in association with India Meteorological Department, Regional Meteorological Centre, Guwahati and Northern Hemisphere Analysis Centre, New Delhi, Ministry of Earth Science, Govt. of India reports the weather forecasts for the next five days, i.e., from 20<sup>th</sup> to 24<sup>th</sup> August, 2014 as given below:

Significant past weather for the preceding bi-weekly of Imphal - West (15<sup>th</sup> to 18<sup>th</sup> August, 2014)

During past four days sky was partly cloudy to mainly cloudy. 67.7 mm rainfall was recorded during past four days. Maximum temperature range observed was 30.9 – 32.4 °C, range of minimum temperature observed was 19.9 – 22.0 °C, mean relative humidity observed in morning and afternoon were 89.3 % and 83.8 % respectively. The average wind speed range was 0.5 – 3.0 km/hr.

Weather forecast for next five days of Imphal-East (20<sup>th</sup> to 24<sup>th</sup> August, 2014)

There may be light rains upto Saturday. Sky may be partly cloudy to cloudy with maximum temp. of 31.0 – 32.0 °C & minimum temp. 22.0 – 23.0 °C. Relative humidity may reach a maximum of 99 % (maximum RH) & 90 % (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
<b>Field Crops</b>			
<b>Rice</b>	Tillering of <i>Main Kharif</i>		- Ridges may be well constructed to maintain optimum water level of 5-8cm.
		Case worm, borer, leaf folder, plant hopper or thrips	Spray Coragen @3ml/15 lit of water or Lambdacythothrin @ 15ml/ 15 litre of water (at least three pumps per sangam) after rains.
		Gall midge	- For gall midge, spray Fipronil @ 2g/ 15 lit water after rains.
<b>Soybean &amp; Groundnut</b>	Vegetative to flowering/ pegging		- Drainage system may be well constructed around the crop field to avoid water logging as there is likely to have rains during next five days.
<b>Storage</b>			- Clean and store the seeds in RC-seed bins after proper drying. Check for germination of seeds or fungal growth. After proper drying, store grains/ seeds in well ventilated godowns.
<b>Horticulture Crops</b>			
<b>Cabbage/ Cauliflower/ Broccoli</b>	Nursery raising		- Farmers having polyhouses may raise nurseries of cole crops. - Prophylactic and curative measures such as soil fumigation/ soil sterilization against damping off should be strictly followed with either Captan or Sixer. - Provide moveable/ temporary sheds to protect from rain.
<b>Potato</b>	Land preparation		- Land preparation for planting potato for early crop and also for production of seed may be started after the rains in foothills and upland area. - Select the area with fertile and sandy loam soil rather than with stone and gravel.
<b>Ginger</b>	Rhizome initiation	Shoot borer/ soft rot	- Spray Dichlorovos @0.5ml/lit water and Sixer (Carbendazim + Mencozeb) @ 2g/lit water as curative as well as prophylactic measure. - Drain out excess water from the field.
<b>Turmeric</b>	Rhizome initiation	Taphrine leaf blotch and other leaf spot	- Spray Redomil MZ 72 WP @ 2g/lit water at least two times alternately with Sixer at 15 days interval after the wet spell. - Drain out excess water from the field.
<b>Animal Sciences</b>			
Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
<b>Poultry</b>	All susceptible age groups (as and when required)	Ranikhet disease	Vaccinate against Ranikhet disease.
		Fowl pox	- Vaccinate against fowl pox. If already infected, paint with Iodine tincture or Betadine liquid daily on pox growth.
		Management	Add Furazolidone @ 100g in 100 kg of feed for one week. Keep litter material dry and add lime powder (deactivated) @ 3-4 kg per 100sq. ft.



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		Parasites (external)	Spray Butox liquid @ 2 ml/ lit of water twice a week.
<b>Sheep/ Goat</b>	Above 3 months of age (as and when required)	Enterotoxaemia	Enterotoxaemia vaccination if available (M.C.C.V.) at 5 cc sub-cutaneously.
		Ectoparasites	Brush the animal using medicated solution (Butox liquid @ 2 ml/ lit of water) twice a week.
<b>Pig</b>	Above 3 months of age (as and when required)	Coccidial infection (Diarrhea)	Ofloxacin tab twice daily for 5 days.
		Deworming	- Deworming against Helminth parasites using Piperazine citrate @ 30 ml per adult animal once.
		Ticks	Add Butox liquid @ 2 ml/ lit of water and use the solution twice a week while brushing the animal.
			Give mineral mixture like Vimicon and Ascagold suspension in pregnant sow @ 20g and 20ml resp. in feed.
<b>Cattle / Buffalo/ Mithun</b>	Above 3 months of age (as and when required)	Black Quarter	- B.Q. vaccination may be carried out to control occurrence of Black Quarter disease during cold season (Nov. & Dec.)
		Tick	Add Butox @ 2cc/ lit of water and bath animal using the solution at fortnight interval.
		Amphistomiasis	- Tolzan-F @ 30 ml/ 100kg body weight.
<b>Fishery:</b>			
<b>Type of Farming</b>	<b>Stage</b>	<b>Management</b>	<b>Agro-metrological advisories</b>
Carp culture	Breeding	Pond and water	- Clean and clear water having 7.0-7.8 pH free from unwanted vegetation and insects. Water depth should be maintained at 1.0-1.5m.
		Fish	- Select good quality of carp brooders (2-4 years old) having more than 1kg b. wt. for Rohu, Mrigal, Catla, Kuri for seed production. For Pengba & Khabak b. wt. May be less than 300g.
		Hormone dose	- Ovitide/ Wova-FH/ Ovaprim@ 0.5ml/kg body weight can be injected to induce for spawning.
	nurseries		- Ponds should be free from unwanted vegetation and insects and water depth should be maintained at 1.0-1.5m. p <sup>H</sup> of pond water should be maintained at 7.0-7.5. Feeds should be provided 2-3 times a day @ 5-10 body weight per day. 20-30 million spawn can be stock in 1 ha.
	Grow - out	Pond and water	- Regular manuring at interval of 30 days with a slurry of RCD @ 1500kg/ha. Maintained p <sup>H</sup> of pond water at 7.0-7.5. Greenish colouration of water is desirable. If any change in colour, odour of water half of the water should be drain out and replace with fresh water.
		Fish	- 8000-10,000 fingerlings/ha can be stocked. Sampling of fish should be done by regular netting.
Feed		- Well balanced feed fortified with vitamins and minerals should be provided @ 3-5% body weight per day. Feed can be fed at 2-3 times a day.	
Paddy cum fish culture	Water management		- Maintained 1.0 m water depth of the trenches in paddy field. Provide rice bran and mustard oil cake (1:1) as supplementary feed. Avoid insecticide/pesticide application.

(I. Meghachandra Singh)  
Scientist i/c, GKMS



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**“Integrated Agromet Advisory Services”**

**MANIPUR BULLETIN**

**19<sup>th</sup> August, 2014**

**Imphal-West**

IAAS, ICAR-RC Manipur Centre in association with India Meteorological Department, Regional Meteorological Centre, Guwahati and Northern Hemisphere Analysis Centre, New Delhi, Ministry of Earth Science, Govt. of India reports the weather forecasts for the next five days, i.e., from 20<sup>th</sup> to 24<sup>th</sup> August, 2014 as given below:

Significant past weather for the preceding bi-weekly of Imphal - West (15<sup>th</sup> to 18<sup>th</sup> August, 2014)

During past four days sky was partly cloudy to mainly cloudy. 67.7 mm rainfall was recorded during past four days. Maximum temperature range observed was 30.9 – 32.4 °C, range of minimum temperature observed was 19.9 – 22.0 °C, mean relative humidity observed in morning and afternoon were 89.3 % and 83.8 % respectively. The average wind speed range was 0.5 – 3.0 km/hr.

Weather forecast for next five days of Imphal-West (20<sup>th</sup> to 24<sup>th</sup> August, 2014)

There may be light rains upto Saturday. Sky may be partly cloudy to cloudy with maximum temp. of 30.0 – 32.0 °C & minimum temp. 21.0 – 23.0 °C. Relative humidity may reach a maximum of 100 % (maximum RH) & 90 % (minimum RH). The average wind speed may be 3-4 km/hr during next five days.

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
<b>Field Crops</b>			
<b>Rice</b>	Tillering of <i>Main Kharif</i>		- Ridges may be well constructed to maintain optimum water level of 5-8cm.
		Case worm, borer, leaf folder, plant hopper or thrips	Spray Coragen @3ml/15 lit of water or Lambdacythothrin @ 15ml/ 15 litre of water (at least three pumps per sangam) after rains.
		Gall midge	- For gall midge, spray Fipronil @ 2g/ 15 lit water after rains.
<b>Soybean &amp; Groundnut</b>	Vegetative to flowering/ pegging		- Drainage system may be well constructed around the crop field to avoid water logging as there is likely to have rains during next five days.
<b>Storage</b>			- Clean and store the seeds in RC-seed bins after proper drying. Check for germination of seeds or fungal growth. After proper drying, store grains/ seeds in well ventilated godowns.
<b>Horticulture Crops</b>			
<b>Cabbage/ Cauliflower/ Broccoli</b>	Nursery raising		- Farmers having polyhouses may raise nurseries of cole crops. - Prophylactic and curative measures such as soil fumigation/ soil sterilization against damping off should be strictly followed with either Captan or Sixer. - Provide moveable/ temporary sheds to protect from rain.
<b>Potato</b>	Land preparation		- Land preparation for planting potato for early crop and also for production of seed may be started after the rains in foothills and upland area. - Select the area with fertile and sandy loam soil rather than with stone and gravel.
<b>Ginger</b>	Rhizome initiation	Shoot borer/ soft rot	- Spray Dichlorovos @0.5ml/lit water and Sixer (Carbendazim + Mencozeb) @ 2g/lit water as curative as well as prophylactic measure. - Drain out excess water from the field.
<b>Turmeric</b>	Rhizome initiation	Taphrine leaf blotch and other leaf spot	- Spray Redomil MZ 72 WP @ 2g/lit water at least two times alternately with Sixer at 15 days interval after the wet spell. - Drain out excess water from the field.
<b>Animal Sciences</b>			
Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
<b>Poultry</b>	All susceptible age groups (as and when required)	Ranikhet disease	Vaccinate against Ranikhet disease.
		Fowl pox	- Vaccinate against fowl pox. If already infected, paint with Iodine tincture or Betadine liquid daily on pox growth.
		Management	Add Furazolidone @ 100g in 100 kg of feed for one week. Keep litter material dry and add lime powder (deactivated) @ 3-4 kg per 100sq. ft.



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		Parasites (external)	Spray Butox liquid @ 2 ml/ lit of water twice a week.
<b>Sheep/ Goat</b>	Above 3 months of age (as and when required)	Enterotoxaemia	Enterotoxaemia vaccination if available (M.C.C.V.) at 5 cc sub-cutaneously.
		Ectoparasites	Brush the animal using medicated solution (Butox liquid @ 2 ml/ lit of water) twice a week.
<b>Pig</b>	Above 3 months of age (as and when required)	Coccidial infection (Diarrhea)	Ofloxacin tab twice daily for 5 days.
		Deworming	- Deworming against Helminth parasites using Piperazine citrate @ 30 ml per adult animal once.
		Ticks	Add Butox liquid @ 2 ml/ lit of water and use the solution twice a week while brushing the animal.
			Give mineral mixture like Vimicon and Ascagold suspension in pregnant sow @ 20g and 20ml resp. in feed.
<b>Cattle / Buffalo/ Mithun</b>	Above 3 months of age (as and when required)	Black Quarter	- B.Q. vaccination may be carried out to control occurrence of Black Quarter disease during cold season (Nov. & Dec.)
		Tick	Add Butox @ 2cc/ lit of water and bath animal using the solution at fortnight interval.
		Amphistomiasis	- Tolzan-F @ 30 ml/ 100kg body weight.
<b>Fishery:</b>			
<b>Type of Farming</b>	<b>Stage</b>	<b>Management</b>	<b>Agro-metrological advisories</b>
Carp culture	Breeding	Pond and water	- Clean and clear water having 7.0-7.8 pH free from unwanted vegetation and insects. Water depth should be maintained at 1.0-1.5m.
		Fish	- Select good quality of carp brooders (2-4 years old) having more than 1kg b. wt. for Rohu, Mrigal, Catla, Kuri for seed production. For Pengba & Khabak b. wt. May be less than 300g.
		Hormone dose	- Ovotide/ Wova-FH/ Ovaprim@ 0.5ml/kg body weight can be injected to induce for spawning.
	nurseries		- Ponds should be free from unwanted vegetation and insects and water depth should be maintained at 1.0-1.5m. p <sup>H</sup> of pond water should be maintained at 7.0-7.5. Feeds should be provided 2-3 times a day @ 5-10 body weight per day. 20-30 million spawn can be stocked in 1 ha.
	Grow - out	Pond and water	- Regular manuring at interval of 30 days with a slurry of RCD @ 1500kg/ha. Maintained p <sup>H</sup> of pond water at 7.0-7.5. Greenish colouration of water is desirable. If any change in colour, odour of water half of the water should be drain out and replace with fresh water.
		Fish	- 8000-10,000 fingerlings/ha can be stocked. Sampling of fish should be done by regular netting.
Feed		- Well balanced feed fortified with vitamins and minerals should be provided @ 3-5% body weight per day. Feed can be fed at 2-3 times a day.	
Paddy cum fish culture	Water management		- Maintained 1.0 m water depth of the trenches in paddy field. Provide rice bran and mustard oil cake (1:1) as supplementary feed. Avoid insecticide/pesticide application.

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**“Integrated Agromet Advisory Services”**

**MANIPUR BULLETIN**

**19<sup>th</sup> August, 2014**

**Senapati**

IAAS, ICAR-RC Manipur Centre in association with India Meteorological Department, Regional Meteorological Centre, Guwahati and Northern Hemisphere Analysis Centre, New Delhi, Ministry of Earth Science, Govt. of India reports the weather forecasts for the next five days, i.e., from 20<sup>th</sup> to 24<sup>th</sup> August, 2014 as given below:

Significant past weather for the preceding bi-weekly of Imphal - West (15<sup>th</sup> to 18<sup>th</sup> August, 2014)

During past four days sky was partly cloudy to mainly cloudy. 67.7 mm rainfall was recorded during past four days. Maximum temperature range observed was 30.9 – 32.4 °C, range of minimum temperature observed was 19.9 – 22.0 °C, mean relative humidity observed in morning and afternoon were 89.3 % and 83.8 % respectively. The average wind speed range was 0.5 – 3.0 km/hr.

Weather forecast for next five days of Senapati (20<sup>th</sup> to 24<sup>th</sup> August, 2014)

There may be light rains upto Saturday. Sky may be partly cloudy to cloudy with maximum temp. of 29.0 – 31.0 °C & minimum temp. 19.0 – 21.0 °C. Relative humidity may reach a maximum of 98 % (maximum RH) & 88 % (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
<b>Field Crops</b>			
<b>Rice</b>	Tillering of <i>Main Kharif</i>		- Ridges may be well constructed to maintain optimum water level of 5-8cm.
		Case worm, borer, leaf folder, plant hopper or thrips	Spray Coragen @3ml/15 lit of water or Lambdacythothrin @ 15ml/ 15 litre of water (at least three pumps per sangam) after rains.
		Gall midge	- For gall midge, spray Fipronil @ 2g/ 15 lit water after rains.
<b>Soybean &amp; Groundnut</b>	Vegetative to flowering/ pegging		- Drainage system may be well constructed around the crop field to avoid water logging as there is likely to have rains during next five days.
<b>Storage</b>			- Clean and store the seeds in RC-seed bins after proper drying. Check for germination of seeds or fungal growth. After proper drying, store grains/ seeds in well ventilated godowns.
<b>Horticulture Crops</b>			
<b>Cabbage/ Cauliflower/ Broccoli</b>	Nursery raising		- Farmers having polyhouses may raise nurseries of cole crops. - Prophylactic and curative measures such as soil fumigation/ soil sterilization against damping off should be strictly followed with either Captan or Sixer. - Provide moveable/ temporary sheds to protect from rain.
<b>Potato</b>	Land preparation		- Land preparation for planting potato for early crop and also for production of seed may be started after the rains in foothills and upland area. - Select the area with fertile and sandy loam soil rather than with stone and gravel.
<b>Ginger</b>	Rhizome initiation	Shoot borer/ soft rot	- Spray Dichlorovos @0.5ml/lit water and Sixer (Carbendazim + Mencozeb) @ 2g/lit water as curative as well as prophylactic measure. - Drain out excess water from the field.
<b>Turmeric</b>	Rhizome initiation	Taphrine leaf blotch and other leaf spot	- Spray Redomil MZ 72 WP @ 2g/lit water at least two times alternately with Sixer at 15 days interval after the wet spell. - Drain out excess water from the field.
<b>Animal Sciences</b>			
Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
<b>Poultry</b>	All susceptible age groups (as and when required)	Ranikhet disease	Vaccinate against Ranikhet disease.
		Fowl pox	- Vaccinate against fowl pox. If already infected, paint with Iodine tincture or Betadine liquid daily on pox growth.
		Management	Add Furazolidone @ 100g in 100 kg of feed for one week. Keep litter material dry and add lime powder (deactivated) @ 3-4 kg per 100sq. ft.



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**“Integrated Agromet Advisory Services”**

		Parasites (external)	Spray Butox liquid @ 2 ml/ lit of water twice a week.
<b>Sheep/ Goat</b>	Above 3 months of age (as and when required)	Enterotoxaemia	Enterotoxaemia vaccination if available (M.C.C.V.) at 5 cc sub-cutaneously.
		Ectoparasites	Brush the animal using medicated solution (Butox liquid @ 2 ml/ lit of water) twice a week.
<b>Pig</b>	Above 3 months of age (as and when required)	Coccidial infection (Diarrhea)	Ofloxacin tab twice daily for 5 days.
		Deworming	- Deworming against Helminth parasites using Piperazine citrate @ 30 ml per adult animal once.
		Ticks	Add Butox liquid @ 2 ml/ lit of water and use the solution twice a week while brushing the animal.
			Give mineral mixture like Vimicon and Ascagold suspension in pregnant sow @ 20g and 20ml resp. in feed.
<b>Cattle / Buffalo/ Mithun</b>	Above 3 months of age (as and when required)	Black Quarter	- B.Q. vaccination may be carried out to control occurrence of Black Quarter disease during cold season (Nov. & Dec.)
		Tick	Add Butox @ 2cc/ lit of water and bath animal using the solution at fortnight interval.
		Amphistomiasis	- Tolzan-F @ 30 ml/ 100kg body weight.
<b>Fishery:</b>			
<b>Type of Farming</b>	<b>Stage</b>	<b>Management</b>	<b>Agro-metrological advisories</b>
Carp culture	Breeding	Pond and water	- Clean and clear water having 7.0-7.8 pH free from unwanted vegetation and insects. Water depth should be maintained at 1.0-1.5m.
		Fish	- Select good quality of carp brooders (2-4 years old) having more than 1kg b. wt. for Rohu, Mrigal, Catla, Kuri for seed production. For Pengba & Khabak b. wt. May be less than 300g.
		Hormone dose	- Ovotide/ Wova-FH/ Ovaprim@ 0.5ml/kg body weight can be injected to induce for spawning.
	nurseries		- Ponds should be free from unwanted vegetation and insects and water depth should be maintained at 1.0-1.5m. p <sup>H</sup> of pond water should be maintained at 7.0-7.5. Feeds should be provided 2-3 times a day @ 5-10 body weight per day. 20-30 million spawn can be stock in 1 ha.
	Grow - out	Pond and water	- Regular manuring at interval of 30 days with a slurry of RCD @ 1500kg/ha. Maintained p <sup>H</sup> of pond water at 7.0-7.5. Greenish colouration of water is desirable. If any change in colour, odour of water half of the water should be drain out and replace with fresh water.
		Fish	- 8000-10,000 fingerlings/ha can be stocked. Sampling of fish should be done by regular netting.
Feed		- Well balanced feed fortified with vitamins and minerals should be provided @ 3-5% body weight per day. Feed can be fed at 2-3 times a day.	
Paddy cum fish culture	Water management		- Maintained 1.0 m water depth of the trenches in paddy field. Provide rice bran and mustard oil cake (1:1) as supplementary feed. Avoid insecticide/pesticide application.

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Scientist i/c, GKMS



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**“Integrated Agromet Advisory Services”**

**MANIPUR BULLETIN**

**19<sup>th</sup> August, 2014**

**Tamenglong**

IAAS, ICAR-RC Manipur Centre in association with India Meteorological Department, Regional Meteorological Centre, Guwahati and Northern Hemisphere Analysis Centre, New Delhi, Ministry of Earth Science, Govt. of India reports the weather forecasts for the next five days, i.e., from 20<sup>th</sup> to 24<sup>th</sup> August, 2014 as given below:

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Weather forecast for next five days of Tamenglong (20<sup>th</sup> to 24<sup>th</sup> August, 2014)

There may be light rains upto Saturday. Sky may be partly cloudy to cloudy with maximum temp. of 31.0 – 33.0 °C & minimum temp. 22.0 – 24.0 °C. Relative humidity may reach a maximum of 99 % (maximum RH) & 91 % (minimum RH). The average wind speed may be 3-4 km/hr during next five days.

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
<b>Field Crops</b>			
<b>Rice</b>	Tillering of <i>Main Kharif</i>		- Ridges may be well constructed to maintain optimum water level of 5-8cm.
		Case worm, borer, leaf folder, plant hopper or thrips	Spray Coragen @3ml/15 lit of water or Lambdacythothrin @ 15ml/ 15 litre of water (at least three pumps per sangam) after rains.
		Gall midge	- For gall midge, spray Fipronil @ 2g/ 15 lit water after rains.
<b>Soybean &amp; Groundnut</b>	Vegetative to flowering/ pegging		- Drainage system may be well constructed around the crop field to avoid water logging as there is likely to have rains during next five days.
<b>Storage</b>			- Clean and store the seeds in RC-seed bins after proper drying. Check for germination of seeds or fungal growth. After proper drying, store grains/ seeds in well ventilated godowns.
<b>Horticulture Crops</b>			
<b>Cabbage/ Cauliflower/ Broccoli</b>	Nursery raising		- Farmers having polyhouses may raise nurseries of cole crops. - Prophylactic and curative measures such as soil fumigation/ soil sterilization against damping off should be strictly followed with either Captan or Sixer. - Provide moveable/ temporary sheds to protect from rain.
<b>Potato</b>	Land preparation		- Land preparation for planting potato for early crop and also for production of seed may be started after the rains in foothills and upland area. - Select the area with fertile and sandy loam soil rather than with stone and gravel.
<b>Ginger</b>	Rhizome initiation	Shoot borer/ soft rot	- Spray Dichlorovos @0.5ml/lit water and Sixer (Carbendazim + Mencozeb) @ 2g/lit water as curative as well as prophylactic measure. - Drain out excess water from the field.
<b>Turmeric</b>	Rhizome initiation	Taphrine leaf blotch and other leaf spot	- Spray Redomil MZ 72 WP @ 2g/lit water at least two times alternately with Sixer at 15 days interval after the wet spell. - Drain out excess water from the field.
<b>Animal Sciences</b>			
Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
<b>Poultry</b>	All susceptible age groups (as and when required)	Ranikhet disease	Vaccinate against Ranikhet disease.
		Fowl pox	- Vaccinate against fowl pox. If already infected, paint with Iodine tincture or Betadine liquid daily on pox growth.
		Management	Add Furazolidone @ 100g in 100 kg of feed for one week. Keep litter material dry and add lime powder (deactivated) @ 3-4 kg per 100sq. ft.



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		Parasites (external)	Spray Butox liquid @ 2 ml/ lit of water twice a week.
<b>Sheep/ Goat</b>	Above 3 months of age (as and when required)	Enterotoxaemia	Enterotoxaemia vaccination if available (M.C.C.V.) at 5 cc sub-cutaneously.
		Ectoparasites	Brush the animal using medicated solution (Butox liquid @ 2 ml/ lit of water) twice a week.
<b>Pig</b>	Above 3 months of age (as and when required)	Coccidial infection (Diarrhea)	Ofloxacin tab twice daily for 5 days.
		Deworming	- Deworming against Helminth parasites using Piperazine citrate @ 30 ml per adult animal once.
		Ticks	Add Butox liquid @ 2 ml/ lit of water and use the solution twice a week while brushing the animal.
			Give mineral mixture like Vimicon and Ascagold suspension in pregnant sow @ 20g and 20ml resp. in feed.
<b>Cattle / Buffalo/ Mithun</b>	Above 3 months of age (as and when required)	Black Quarter	- B.Q. vaccination may be carried out to control occurrence of Black Quarter disease during cold season (Nov. & Dec.)
		Tick	Add Butox @ 2cc/ lit of water and bath animal using the solution at fortnight interval.
		Amphistomiasis	- Tolzan-F @ 30 ml/ 100kg body weight.
<b>Fishery:</b>			
<b>Type of Farming</b>	<b>Stage</b>	<b>Management</b>	<b>Agro-metrological advisories</b>
Carp culture	Breeding	Pond and water	- Clean and clear water having 7.0-7.8 pH free from unwanted vegetation and insects. Water depth should be maintained at 1.0-1.5m.
		Fish	- Select good quality of carp brooders (2-4 years old) having more than 1kg b. wt. for Rohu, Mrigal, Catla, Kuri for seed production. For Pengba & Khabak b. wt. May be less than 300g.
		Hormone dose	- Ovitide/ Wova-FH/ Ovaprim@ 0.5ml/kg body weight can be injected to induce for spawning.
	nurseries		- Ponds should be free from unwanted vegetation and insects and water depth should be maintained at 1.0-1.5m. p <sup>H</sup> of pond water should be maintained at 7.0-7.5. Feeds should be provided 2-3 times a day @ 5-10 body weight per day. 20-30 million spawn can be stocked in 1 ha.
	Grow - out	Pond and water	- Regular manuring at interval of 30 days with a slurry of RCD @ 1500kg/ha. Maintained p <sup>H</sup> of pond water at 7.0-7.5. Greenish colouration of water is desirable. If any change in colour, odour of water half of the water should be drain out and replace with fresh water.
		Fish	- 8000-10,000 fingerlings/ha can be stocked. Sampling of fish should be done by regular netting.
Feed		- Well balanced feed fortified with vitamins and minerals should be provided @ 3-5% body weight per day. Feed can be fed at 2-3 times a day.	
Paddy cum fish culture	Water management		- Maintained 1.0 m water depth of the trenches in paddy field. Provide rice bran and mustard oil cake (1:1) as supplementary feed. Avoid insecticide/pesticide application.

(I. Meghachandra Singh)  
Scientist i/c, GKMS



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



**“Integrated Agromet Advisory Services”**

**MANIPUR BULLETIN**

**19<sup>th</sup> August, 2014**

**Thoubal**

IAAS, ICAR-RC Manipur Centre in association with India Meteorological Department, Regional Meteorological Centre, Guwahati and Northern Hemisphere Analysis Centre, New Delhi, Ministry of Earth Science, Govt. of India reports the weather forecasts for the next five days, i.e., from 20<sup>th</sup> to 24<sup>th</sup> August, 2014 as given below:

Significant past weather for the preceding bi-weekly of Imphal - West (15<sup>th</sup> to 18<sup>th</sup> August, 2014)

During past four days sky was partly cloudy to mainly cloudy. 67.7 mm rainfall was recorded during past four days. Maximum temperature range observed was 30.9 – 32.4 °C, range of minimum temperature observed was 19.9 – 22.0 °C, mean relative humidity observed in morning and afternoon were 89.3 % and 83.8 % respectively. The average wind speed range was 0.5 – 3.0 km/hr.

Weather forecast for next five days of Thoubal (20<sup>th</sup> to 24<sup>th</sup> August, 2014)

There may be light rains upto Saturday. Sky may be partly cloudy to cloudy with maximum temp. of 29.0 – 31.0 °C & minimum temp. 21.0 – 23.0 °C. Relative humidity may reach a maximum of 99 % (maximum RH) & 94 % (minimum RH). The average wind speed may be 2-6 km/hr during next five days.

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
<b>Field Crops</b>			
<b>Rice</b>	Tillering of <i>Main Kharif</i>		- Ridges may be well constructed to maintain optimum water level of 5-8cm.
		Case worm, borer, leaf folder, plant hopper or thrips	Spray Coragen @3ml/15 lit of water or Lambdacythothrin @ 15ml/ 15 litre of water (at least three pumps per sangam) after rains.
		Gall midge	- For gall midge, spray Fipronil @ 2g/ 15 lit water after rains.
<b>Soybean &amp; Groundnut</b>	Vegetative to flowering/ pegging		- Drainage system may be well constructed around the crop field to avoid water logging as there is likely to have rains during next five days.
<b>Storage</b>			- Clean and store the seeds in RC-seed bins after proper drying. Check for germination of seeds or fungal growth. After proper drying, store grains/ seeds in well ventilated godowns.
<b>Horticulture Crops</b>			
<b>Cabbage/ Cauliflower/ Broccoli</b>	Nursery raising		- Farmers having polyhouses may raise nurseries of cole crops. - Prophylactic and curative measures such as soil fumigation/ soil sterilization against damping off should be strictly followed with either Captan or Sixer. - Provide moveable/ temporary sheds to protect from rain.
<b>Potato</b>	Land preparation		- Land preparation for planting potato for early crop and also for production of seed may be started after the rains in foothills and upland area. - Select the area with fertile and sandy loam soil rather than with stone and gravel.
<b>Ginger</b>	Rhizome initiation	Shoot borer/ soft rot	- Spray Dichlorovos @0.5ml/lit water and Sixer (Carbendazim + Mencozeb) @ 2g/lit water as curative as well as prophylactic measure. - Drain out excess water from the field.
<b>Turmeric</b>	Rhizome initiation	Taphrine leaf blotch and other leaf spot	- Spray Redomil MZ 72 WP @ 2g/lit water at least two times alternately with Sixer at 15 days interval after the wet spell. - Drain out excess water from the field.
<b>Animal Sciences</b>			
Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
<b>Poultry</b>	All susceptible age groups (as and when required)	Ranikhet disease	Vaccinate against Ranikhet disease.
		Fowl pox	- Vaccinate against fowl pox. If already infected, paint with Iodine tincture or Betadine liquid daily on pox growth.
		Management	Add Furazolidone @ 100g in 100 kg of feed for one week. Keep litter material dry and add lime powder (deactivated) @ 3-4 kg per 100sq. ft.



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



**“Integrated Agromet Advisory Services”**

		Parasites (external)	Spray Butox liquid @ 2 ml/ lit of water twice a week.
<b>Sheep/ Goat</b>	Above 3 months of age (as and when required)	Enterotoxaemia	Enterotoxaemia vaccination if available (M.C.C.V.) at 5 cc sub-cutaneously.
		Ectoparasites	Brush the animal using medicated solution (Butox liquid @ 2 ml/ lit of water) twice a week.
<b>Pig</b>	Above 3 months of age (as and when required)	Coccidial infection (Diarrhea)	Ofloxacin tab twice daily for 5 days.
		Deworming	- Deworming against Helminth parasites using Piperazine citrate @ 30 ml per adult animal once.
		Ticks	Add Butox liquid @ 2 ml/ lit of water and use the solution twice a week while brushing the animal.
			Give mineral mixture like Vimicon and Ascagold suspension in pregnant sow @ 20g and 20ml resp. in feed.
<b>Cattle / Buffalo/ Mithun</b>	Above 3 months of age (as and when required)	Black Quarter	- B.Q. vaccination may be carried out to control occurrence of Black Quarter disease during cold season (Nov. & Dec.)
		Tick	Add Butox @ 2cc/ lit of water and bath animal using the solution at fortnight interval.
		Amphistomiasis	- Tolzan-F @ 30 ml/ 100kg body weight.
<b>Fishery:</b>			
<b>Type of Farming</b>	<b>Stage</b>	<b>Management</b>	<b>Agro-metrological advisories</b>
Carp culture	Breeding	Pond and water	- Clean and clear water having 7.0-7.8 pH free from unwanted vegetation and insects. Water depth should be maintained at 1.0-1.5m.
		Fish	- Select good quality of carp brooders (2-4 years old) having more than 1kg b. wt. for Rohu, Mrigal, Catla, Kuri for seed production. For Pengba & Khabak b. wt. May be less than 300g.
		Hormone dose	- Ovotide/ Wova-FH/ Ovaprim@ 0.5ml/kg body weight can be injected to induce for spawning.
	nurseries		- Ponds should be free from unwanted vegetation and insects and water depth should be maintained at 1.0-1.5m. p <sup>H</sup> of pond water should be maintained at 7.0-7.5. Feeds should be provided 2-3 times a day @ 5-10 body weight per day. 20-30 million spawn can be stocked in 1 ha.
	Grow - out	Pond and water	- Regular manuring at interval of 30 days with a slurry of RCD @ 1500kg/ha. Maintained p <sup>H</sup> of pond water at 7.0-7.5. Greenish colouration of water is desirable. If any change in colour, odour of water half of the water should be drain out and replace with fresh water.
		Fish	- 8000-10,000 fingerlings/ha can be stocked. Sampling of fish should be done by regular netting.
Feed		- Well balanced feed fortified with vitamins and minerals should be provided @ 3-5% body weight per day. Feed can be fed at 2-3 times a day.	
Paddy cum fish culture	Water management		- Maintained 1.0 m water depth of the trenches in paddy field. Provide rice bran and mustard oil cake (1:1) as supplementary feed. Avoid insecticide/pesticide application.

(I. Meghachandra Singh)  
Scientist i/c, GKMS



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



**“Integrated Agromet Advisory Services”**

**MANIPUR BULLETIN**

**19<sup>th</sup> August, 2014**

**Ukhrul**

IAAS, ICAR-RC Manipur Centre in association with India Meteorological Department, Regional Meteorological Centre, Guwahati and Northern Hemisphere Analysis Centre, New Delhi, Ministry of Earth Science, Govt. of India reports the weather forecasts for the next five days, i.e., from 20<sup>th</sup> to 24<sup>th</sup> August, 2014 as given below:

Significant past weather for the preceding bi-weekly of Imphal - West (15<sup>th</sup> to 18<sup>th</sup> August, 2014)

During past four days sky was partly cloudy to mainly cloudy. 67.7 mm rainfall was recorded during past four days. Maximum temperature range observed was 30.9 – 32.4 °C, range of minimum temperature observed was 19.9 – 22.0 °C, mean relative humidity observed in morning and afternoon were 89.3 % and 83.8 % respectively. The average wind speed range was 0.5 – 3.0 km/hr.

Weather forecast for next five days of Ukhrul (20<sup>th</sup> to 24<sup>th</sup> August, 2014)

There may be light rains upto Saturday. Sky may be partly cloudy to cloudy with maximum temp. of 29.0 – 31.0 °C & minimum temp. 19.0 – 20.0 °C. Relative humidity may reach a maximum of 99 % (maximum RH) & 92 % (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
<b>Field Crops</b>			
<b>Rice</b>	Tillering of <i>Main Kharif</i>		- Ridges may be well constructed to maintain optimum water level of 5-8cm.
		Case worm, borer, leaf folder, plant hopper or thrips	Spray Coragen @3ml/15 lit of water or Lambdacythothrin @ 15ml/ 15 litre of water (at least three pumps per sangam) after rains.
		Gall midge	- For gall midge, spray Fipronil @ 2g/ 15 lit water after rains.
<b>Soybean &amp; Groundnut</b>	Vegetative to flowering/ pegging		- Drainage system may be well constructed around the crop field to avoid water logging as there is likely to have rains during next five days.
<b>Storage</b>			- Clean and store the seeds in RC-seed bins after proper drying. Check for germination of seeds or fungal growth. After proper drying, store grains/ seeds in well ventilated godowns.
<b>Horticulture Crops</b>			
<b>Cabbage/ Cauliflower/ Broccoli</b>	Nursery raising		- Farmers having polyhouses may raise nurseries of cole crops. - Prophylactic and curative measures such as soil fumigation/ soil sterilization against damping off should be strictly followed with either Captan or Sixer. - Provide moveable/ temporary sheds to protect from rain.
<b>Potato</b>	Land preparation		- Land preparation for planting potato for early crop and also for production of seed may be started after the rains in foothills and upland area. - Select the area with fertile and sandy loam soil rather than with stone and gravel.
<b>Ginger</b>	Rhizome initiation	Shoot borer/ soft rot	- Spray Dichlorovos @0.5ml/lit water and Sixer (Carbendazim + Mencozeb) @ 2g/lit water as curative as well as prophylactic measure. - Drain out excess water from the field.
<b>Turmeric</b>	Rhizome initiation	Taphrine leaf blotch and other leaf spot	- Spray Redomil MZ 72 WP @ 2g/lit water at least two times alternately with Sixer at 15 days interval after the wet spell. - Drain out excess water from the field.
<b>Animal Sciences</b>			
Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
<b>Poultry</b>	All susceptible age groups (as and when required)	Ranikhet disease	Vaccinate against Ranikhet disease.
		Fowl pox	- Vaccinate against fowl pox. If already infected, paint with Iodine tincture or Betadine liquid daily on pox growth.
		Management	Add Furazolidone @ 100g in 100 kg of feed for one week. Keep litter material dry and add lime powder (deactivated) @ 3-4 kg per 100sq. ft.



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



**“Integrated Agromet Advisory Services”**

		Parasites (external)	Spray Butox liquid @ 2 ml/ lit of water twice a week.
<b>Sheep/ Goat</b>	Above 3 months of age (as and when required)	Enterotoxaemia	Enterotoxaemia vaccination if available (M.C.C.V.) at 5 cc sub-cutaneously.
		Ectoparasites	Brush the animal using medicated solution (Butox liquid @ 2 ml/ lit of water) twice a week.
<b>Pig</b>	Above 3 months of age (as and when required)	Coccidial infection (Diarrhea)	Ofloxacin tab twice daily for 5 days.
		Deworming	- Deworming against Helminth parasites using Piperazine citrate @ 30 ml per adult animal once.
		Ticks	Add Butox liquid @ 2 ml/ lit of water and use the solution twice a week while brushing the animal.
			Give mineral mixture like Vimicon and Ascagold suspension in pregnant sow @ 20g and 20ml resp. in feed.
<b>Cattle / Buffalo/ Mithun</b>	Above 3 months of age (as and when required)	Black Quarter	- B.Q. vaccination may be carried out to control occurrence of Black Quarter disease during cold season (Nov. & Dec.)
		Tick	Add Butox @ 2cc/ lit of water and bath animal using the solution at fortnight interval.
		Amphistomiasis	- Tolzan-F @ 30 ml/ 100kg body weight.
<b>Fishery:</b>			
<b>Type of Farming</b>	<b>Stage</b>	<b>Management</b>	<b>Agro-metrological advisories</b>
Carp culture	Breeding	Pond and water	- Clean and clear water having 7.0-7.8 pH free from unwanted vegetation and insects. Water depth should be maintained at 1.0-1.5m.
		Fish	- Select good quality of carp brooders (2-4 years old) having more than 1kg b. wt. for Rohu, Mrigal, Catla, Kuri for seed production. For Pengba & Khabak b. wt. May be less than 300g.
		Hormone dose	- Ovitide/ Wova-FH/ Ovaprim@ 0.5ml/kg body weight can be injected to induce for spawning.
	nurseries		- Ponds should be free from unwanted vegetation and insects and water depth should be maintained at 1.0-1.5m. p <sup>H</sup> of pond water should be maintained at 7.0-7.5. Feeds should be provided 2-3 times a day @ 5-10 body weight per day. 20-30 million spawn can be stocked in 1 ha.
	Grow - out	Pond and water	- Regular manuring at interval of 30 days with a slurry of RCD @ 1500kg/ha. Maintained p <sup>H</sup> of pond water at 7.0-7.5. Greenish colouration of water is desirable. If any change in colour, odour of water half of the water should be drain out and replace with fresh water.
		Fish	- 8000-10,000 fingerlings/ha can be stocked. Sampling of fish should be done by regular netting.
Feed		- Well balanced feed fortified with vitamins and minerals should be provided @ 3-5% body weight per day. Feed can be fed at 2-3 times a day.	
Paddy cum fish culture	Water management		- Maintained 1.0 m water depth of the trenches in paddy field. Provide rice bran and mustard oil cake (1:1) as supplementary feed. Avoid insecticide/pesticide application.

(I. Meghachandra Singh)  
Scientist i/c, GKMS



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



**“Integrated Agromet Advisory Services”**

**MANIPUR BULLETIN**

**19<sup>th</sup> August, 2014**

**Bishnupur**

IAAS, ICAR-RC Manipur Centre in association with India Meteorological Department, Regional Meteorological Centre, Guwahati and Northern Hemisphere Analysis Centre, New Delhi, Ministry of Earth Science, Govt. of India reports the weather forecasts for the next five days, i.e., from 20<sup>th</sup> to 24<sup>th</sup> August, 2014 as given below:

Significant past weather for the preceding bi-weekly of Imphal - West (15<sup>th</sup> to 18<sup>th</sup> August, 2014)

During past four days sky was partly cloudy to mainly cloudy. 67.7 mm rainfall was recorded during past four days. Maximum temperature range observed was 30.9 – 32.4 °C, range of minimum temperature observed was 19.9 – 22.0 °C, mean relative humidity observed in morning and afternoon were 89.3 % and 83.8 % respectively. The average wind speed range was 0.5 – 3.0 km/hr.

Weather forecast for next five days of Bishnupur (20<sup>th</sup> to 24<sup>th</sup> August, 2014)

There may be light rains upto Saturday. Sky may be partly cloudy to cloudy with maximum temp. of 30.0 – 32.0 °C & minimum temp. 22.0 – 23.0 °C. Relative humidity may reach a maximum of 99 % (maximum RH) & 94 % (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
<b>Field Crops</b>			
<b>Rice</b>	Tillering of Main Kharif		- Ridges may be well constructed to maintain optimum water level of 5-8cm.
		Case worm, borer, leaf folder, plant hopper or thrips	Spray Coragen @3ml/15 lit of water or Lambdacythothrin @ 15ml/ 15 litre of water (at least three pumps per sangam) after rains.
		Gall midge	- For gall midge, spray Fipronil @ 2g/ 15 lit water after rains.
<b>Soybean &amp; Groundnut</b>	Vegetative to flowering/ pegging		- Drainage system may be well constructed around the crop field to avoid water logging as there is likely to have rains during next five days.
<b>Storage</b>			- Clean and store the seeds in RC-seed bins after proper drying. Check for germination of seeds or fungal growth. After proper drying, store grains/ seeds in well ventilated godowns.
<b>Horticulture Crops</b>			
<b>Cabbage/ Cauliflower/ Broccoli</b>	Nursery raising		- Farmers having polyhouses may raise nurseries of cole crops. - Prophylactic and curative measures such as soil fumigation/ soil sterilization against damping off should be strictly followed with either Captan or Sixer. - Provide moveable/ temporary sheds to protect from rain.
<b>Potato</b>	Land preparation		- Land preparation for planting potato for early crop and also for production of seed may be started after the rains in foothills and upland area. - Select the area with fertile and sandy loam soil rather than with stone and gravel.
<b>Ginger</b>	Rhizome initiation	Shoot borer/ soft rot	- Spray Dichlorovos @0.5ml/lit water and Sixer (Carbendazim + Mencozeb) @ 2g/lit water as curative as well as prophylactic measure. - Drain out excess water from the field.
<b>Turmeric</b>	Rhizome initiation	Taphrine leaf blotch and other leaf spot	- Spray Redomil MZ 72 WP @ 2g/lit water at least two times alternately with Sixer at 15 days interval after the wet spell. - Drain out excess water from the field.
<b>Animal Sciences</b>			
Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
<b>Poultry</b>	All susceptible age groups (as and when required)	Ranikhet disease	Vaccinate against Ranikhet disease.
		Fowl pox	- Vaccinate against fowl pox. If already infected, paint with Iodine tincture or Betadine liquid daily on pox growth.
		Management	Add Furazolidone @ 100g in 100 kg of feed for one week. Keep litter material dry and add lime powder (deactivated) @ 3-4 kg per 100sq. ft.



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



**“Integrated Agromet Advisory Services”**

		Parasites (external)	Spray Butox liquid @ 2 ml/ lit of water twice a week.
<b>Sheep/ Goat</b>	Above 3 months of age (as and when required)	Enterotoxaemia	Enterotoxaemia vaccination if available (M.C.C.V.) at 5 cc sub-cutaneously.
		Ectoparasites	Brush the animal using medicated solution (Butox liquid @ 2 ml/ lit of water) twice a week.
<b>Pig</b>	Above 3 months of age (as and when required)	Coccidial infection (Diarrhea)	Ofloxacin tab twice daily for 5 days.
		Deworming	- Deworming against Helminth parasites using Piperazine citrate @ 30 ml per adult animal once.
		Ticks	Add Butox liquid @ 2 ml/ lit of water and use the solution twice a week while brushing the animal.
			Give mineral mixture like Vimicon and Ascagold suspension in pregnant sow @ 20g and 20ml resp. in feed.
<b>Cattle / Buffalo/ Mithun</b>	Above 3 months of age (as and when required)	Black Quarter	- B.Q. vaccination may be carried out to control occurrence of Black Quarter disease during cold season (Nov. & Dec.)
		Tick	Add Butox @ 2cc/ lit of water and bath animal using the solution at fortnight interval.
		Amphistomiasis	- Tolzan-F @ 30 ml/ 100kg body weight.
<b>Fishery:</b>			
<b>Type of Farming</b>	<b>Stage</b>	<b>Management</b>	<b>Agro-metrological advisories</b>
Carp culture	Breeding	Pond and water	- Clean and clear water having 7.0-7.8 pH free from unwanted vegetation and insects. Water depth should be maintained at 1.0-1.5m.
		Fish	- Select good quality of carp brooders (2-4 years old) having more than 1kg b. wt. for Rohu, Mrigal, Catla, Kuri for seed production. For Pengba & Khabak b. wt. May be less than 300g.
		Hormone dose	- Ovotide/ Wova-FH/ Ovaprim@ 0.5ml/kg body weight can be injected to induce for spawning.
	nurseries		- Ponds should be free from unwanted vegetation and insects and water depth should be maintained at 1.0-1.5m. p <sup>H</sup> of pond water should be maintained at 7.0-7.5. Feeds should be provided 2-3 times a day @ 5-10 body weight per day. 20-30 million spawn can be stocked in 1 ha.
	Grow - out	Pond and water	- Regular manuring at interval of 30 days with a slurry of RCD @ 1500kg/ha. Maintained p <sup>H</sup> of pond water at 7.0-7.5. Greenish colouration of water is desirable. If any change in colour, odour of water half of the water should be drain out and replace with fresh water.
		Fish	- 8000-10,000 fingerlings/ha can be stocked. Sampling of fish should be done by regular netting.
Feed		- Well balanced feed fortified with vitamins and minerals should be provided @ 3-5% body weight per day. Feed can be fed at 2-3 times a day.	
Paddy cum fish culture	Water management		- Maintained 1.0 m water depth of the trenches in paddy field. Provide rice bran and mustard oil cake (1:1) as supplementary feed. Avoid insecticide/pesticide application.

(I. Meghachandra Singh)  
Scientist i/c, GKMS



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



**“Integrated Agromet Advisory Services”**

**MANIPUR BULLETIN**

**19<sup>th</sup> August, 2014**

**Chandel**

IAAS, ICAR-RC Manipur Centre in association with India Meteorological Department, Regional Meteorological Centre, Guwahati and Northern Hemisphere Analysis Centre, New Delhi, Ministry of Earth Science, Govt. of India reports the weather forecasts for the next five days, i.e., from 20<sup>th</sup> to 24<sup>th</sup> August, 2014 as given below:

Significant past weather for the preceding bi-weekly of Imphal - West (15<sup>th</sup> to 18<sup>th</sup> August, 2014)

During past four days sky was partly cloudy to mainly cloudy. 67.7 mm rainfall was recorded during past four days. Maximum temperature range observed was 30.9 – 32.4 °C, range of minimum temperature observed was 19.9 – 22.0 °C, mean relative humidity observed in morning and afternoon were 89.3 % and 83.8 % respectively. The average wind speed range was 0.5 – 3.0 km/hr.

Weather forecast for next five days of Chandel (20<sup>th</sup> to 24<sup>th</sup> August, 2014)

There may be light rains upto Saturday. Sky may be partly cloudy to cloudy with maximum temp. of 31.0 – 33.0 °C & minimum temp. 22.0 – 24.0 °C. Relative humidity may reach a maximum of 99 % (maximum RH) & 95 % (minimum RH). The average wind speed may be 3-5 km/hr during next five days.

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
<b>Field Crops</b>			
<b>Rice</b>	Tillering of <i>Main Kharif</i>		- Ridges may be well constructed to maintain optimum water level of 5-8cm.
		Case worm, borer, leaf folder, plant hopper or thrips	Spray Coragen @3ml/15 lit of water or Lambdacythothrin @ 15ml/ 15 litre of water (at least three pumps per sangam) after rains.
		Gall midge	- For gall midge, spray Fipronil @ 2g/ 15 lit water after rains.
<b>Soybean &amp; Groundnut</b>	Vegetative to flowering/ pegging		- Drainage system may be well constructed around the crop field to avoid water logging as there is likely to have rains during next five days.
<b>Storage</b>			- Clean and store the seeds in RC-seed bins after proper drying. Check for germination of seeds or fungal growth. After proper drying, store grains/ seeds in well ventilated godowns.
<b>Horticulture Crops</b>			
<b>Cabbage/ Cauliflower/ Broccoli</b>	Nursery raising		- Farmers having polyhouses may raise nurseries of cole crops. - Prophylactic and curative measures such as soil fumigation/ soil sterilization against damping off should be strictly followed with either Captan or Sixer. - Provide moveable/ temporary sheds to protect from rain.
<b>Potato</b>	Land preparation		- Land preparation for planting potato for early crop and also for production of seed may be started after the rains in foothills and upland area. - Select the area with fertile and sandy loam soil rather than with stone and gravel.
<b>Ginger</b>	Rhizome initiation	Shoot borer/ soft rot	- Spray Dichlorovos @0.5ml/lit water and Sixer (Carbendazim + Mencozeb) @ 2g/lit water as curative as well as prophylactic measure. - Drain out excess water from the field.
<b>Turmeric</b>	Rhizome initiation	Taphrine leaf blotch and other leaf spot	- Spray Redomil MZ 72 WP @ 2g/lit water at least two times alternately with Sixer at 15 days interval after the wet spell. - Drain out excess water from the field.
<b>Animal Sciences</b>			
Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
<b>Poultry</b>	All susceptible age groups (as and when required)	Ranikhet disease	Vaccinate against Ranikhet disease.
		Fowl pox	- Vaccinate against fowl pox. If already infected, paint with Iodine tincture or Betadine liquid daily on pox growth.
		Management	Add Furazolidone @ 100g in 100 kg of feed for one week. Keep litter material dry and add lime powder (deactivated) @ 3-4 kg per 100sq. ft.



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



**“Integrated Agromet Advisory Services”**

		Parasites (external)	Spray Butox liquid @ 2 ml/ lit of water twice a week.
<b>Sheep/ Goat</b>	Above 3 months of age (as and when required)	Enterotoxaemia	Enterotoxaemia vaccination if available (M.C.C.V.) at 5 cc sub-cutaneously.
		Ectoparasites	Brush the animal using medicated solution (Butox liquid @ 2 ml/ lit of water) twice a week.
<b>Pig</b>	Above 3 months of age (as and when required)	Coccidial infection (Diarrhea)	Ofloxacin tab twice daily for 5 days.
		Deworming	- Deworming against Helminth parasites using Piperazine citrate @ 30 ml per adult animal once.
		Ticks	Add Butox liquid @ 2 ml/ lit of water and use the solution twice a week while brushing the animal.
			Give mineral mixture like Vimicon and Ascagold suspension in pregnant sow @ 20g and 20ml resp. in feed.
<b>Cattle / Buffalo/ Mithun</b>	Above 3 months of age (as and when required)	Black Quarter	- B.Q. vaccination may be carried out to control occurrence of Black Quarter disease during cold season (Nov. & Dec.)
		Tick	Add Butox @ 2cc/ lit of water and bath animal using the solution at fortnight interval.
		Amphistomiasis	- Tolzan-F @ 30 ml/ 100kg body weight.
<b>Fishery:</b>			
<b>Type of Farming</b>	<b>Stage</b>	<b>Management</b>	<b>Agro-metrological advisories</b>
Carp culture	Breeding	Pond and water	- Clean and clear water having 7.0-7.8 pH free from unwanted vegetation and insects. Water depth should be maintained at 1.0-1.5m.
		Fish	- Select good quality of carp brooders (2-4 years old) having more than 1kg b. wt. for Rohu, Mrigal, Catla, Kuri for seed production. For Pengba & Khabak b. wt. May be less than 300g.
		Hormone dose	- Ovitide/ Wova-FH/ Ovaprim@ 0.5ml/kg body weight can be injected to induce for spawning.
	nurseries		- Ponds should be free from unwanted vegetation and insects and water depth should be maintained at 1.0-1.5m. p <sup>H</sup> of pond water should be maintained at 7.0-7.5. Feeds should be provided 2-3 times a day @ 5-10 body weight per day. 20-30 million spawn can be stock in 1 ha.
	Grow - out	Pond and water	- Regular manuring at interval of 30 days with a slurry of RCD @ 1500kg/ha. Maintained p <sup>H</sup> of pond water at 7.0-7.5. Greenish colouration of water is desirable. If any change in colour, odour of water half of the water should be drain out and replace with fresh water.
		Fish	- 8000-10,000 fingerlings/ha can be stocked. Sampling of fish should be done by regular netting.
Feed		- Well balanced feed fortified with vitamins and minerals should be provided @ 3-5% body weight per day. Feed can be fed at 2-3 times a day.	
Paddy cum fish culture	Water management		- Maintained 1.0 m water depth of the trenches in paddy field. Provide rice bran and mustard oil cake (1:1) as supplementary feed. Avoid insecticide/pesticide application.

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



**“Integrated Agromet Advisory Services”**

**MANIPUR BULLETIN**

**19<sup>th</sup> August, 2014**

**Churachandpur**

IAAS, ICAR-RC Manipur Centre in association with India Meteorological Department, Regional Meteorological Centre, Guwahati and Northern Hemisphere Analysis Centre, New Delhi, Ministry of Earth Science, Govt. of India reports the weather forecasts for the next five days, i.e., from 20<sup>th</sup> to 24<sup>th</sup> August, 2014 as given below:

Significant past weather for the preceding bi-weekly of Imphal - West (15<sup>th</sup> to 18<sup>th</sup> August, 2014)

During past four days sky was partly cloudy to mainly cloudy. 67.7 mm rainfall was recorded during past four days. Maximum temperature range observed was 30.9 – 32.4 °C, range of minimum temperature observed was 19.9 – 22.0 °C, mean relative humidity observed in morning and afternoon were 89.3 % and 83.8 % respectively. The average wind speed range was 0.5 – 3.0 km/hr.

Weather forecast for next five days of Churachandpur (20<sup>th</sup> to 24<sup>th</sup> August, 2014)

There may be light rains upto Saturday. Sky may be partly cloudy to cloudy with maximum temp. of 30.0 – 32.0 °C & minimum temp. 21.0 – 23.0 °C. Relative humidity may reach a maximum of 100 % (maximum RH) & 94 % (minimum RH). The average wind speed may be 2-5 km/hr during next five days.

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
<b>Field Crops</b>			
<b>Rice</b>	Tillering of <i>Main Kharif</i>		- Ridges may be well constructed to maintain optimum water level of 5-8cm.
		Case worm, borer, leaf folder, plant hopper or thrips	Spray Coragen @3ml/15 lit of water or Lambdacythothrin @ 15ml/ 15 litre of water (at least three pumps per sangam) after rains.
		Gall midge	- For gall midge, spray Fipronil @ 2g/ 15 lit water after rains.
<b>Soybean &amp; Groundnut</b>	Vegetative to flowering/ pegging		- Drainage system may be well constructed around the crop field to avoid water logging as there is likely to have rains during next five days.
<b>Storage</b>			- Clean and store the seeds in RC-seed bins after proper drying. Check for germination of seeds or fungal growth. After proper drying, store grains/ seeds in well ventilated godowns.
<b>Horticulture Crops</b>			
<b>Cabbage/ Cauliflower/ Broccoli</b>	Nursery raising		- Farmers having polyhouses may raise nurseries of cole crops. - Prophylactic and curative measures such as soil fumigation/ soil sterilization against damping off should be strictly followed with either Captan or Sixer. - Provide moveable/ temporary sheds to protect from rain.
<b>Potato</b>	Land preparation		- Land preparation for planting potato for early crop and also for production of seed may be started after the rains in foothills and upland area. - Select the area with fertile and sandy loam soil rather than with stone and gravel.
<b>Ginger</b>	Rhizome initiation	Shoot borer/ soft rot	- Spray Dichlorovos @0.5ml/lit water and Sixer (Carbendazim + Mencozeb) @ 2g/lit water as curative as well as prophylactic measure. - Drain out excess water from the field.
<b>Turmeric</b>	Rhizome initiation	Taphrine leaf blotch and other leaf spot	- Spray Redomil MZ 72 WP @ 2g/lit water at least two times alternately with Sixer at 15 days interval after the wet spell. - Drain out excess water from the field.
<b>Animal Sciences</b>			
Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
<b>Poultry</b>	All susceptible age groups (as and when required)	Ranikhet disease	Vaccinate against Ranikhet disease.
		Fowl pox	- Vaccinate against fowl pox. If already infected, paint with Iodine tincture or Betadine liquid daily on pox growth.
		Management	Add Furazolidone @ 100g in 100 kg of feed for one week. Keep litter material dry and add lime powder (deactivated) @ 3-4 kg per 100sq. ft.



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		Parasites (external)	Spray Butox liquid @ 2 ml/ lit of water twice a week.
<b>Sheep/ Goat</b>	Above 3 months of age (as and when required)	Enterotoxaemia	Enterotoxaemia vaccination if available (M.C.C.V.) at 5 cc sub-cutaneously.
		Ectoparasites	Brush the animal using medicated solution (Butox liquid @ 2 ml/ lit of water) twice a week.
<b>Pig</b>	Above 3 months of age (as and when required)	Coccidial infection (Diarrhea)	Ofloxacin tab twice daily for 5 days.
		Deworming	- Deworming against Helminth parasites using Piperazine citrate @ 30 ml per adult animal once.
		Ticks	Add Butox liquid @ 2 ml/ lit of water and use the solution twice a week while brushing the animal.
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<b>Cattle / Buffalo/ Mithun</b>	Above 3 months of age (as and when required)	Black Quarter	- B.Q. vaccination may be carried out to control occurrence of Black Quarter disease during cold season (Nov. & Dec.)
		Tick	Add Butox @ 2cc/ lit of water and bath animal using the solution at fortnight interval.
		Amphistomiasis	- Tolzan-F @ 30 ml/ 100kg body weight.
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<b>Type of Farming</b>	<b>Stage</b>	<b>Management</b>	<b>Agro-metrological advisories</b>
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