



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



“Integrated Agromet Advisory Services”

MANIPUR BULLETIN

14th 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 15th to 19th August, 2014 as given below:

Significant past weather for the preceding bi-weekly of Imphal - West (12th to 14th August, 2014)

During past three days sky was partly cloudy to mainly cloudy. **4.3 mm** rainfall was recorded during past three days. Maximum temperature range observed was **31.9 – 33.3 °C**, range of minimum temperature observed was **22.2 – 22.4 °C**, mean relative humidity observed in morning and afternoon were **85.0 %** and **75.0 %** respectively. The average wind speed range was **1.3 – 1.7 km/hr**.

Weather forecast for next five days of Chandel (15th to 19th August, 2014)

There may be moderate to heavy rains upto Tuesday. Sky may be partly cloudy to cloudy with maximum temp. of **32.0 – 34.0 °C** & minimum temp. **22.0 – 24.0 °C**. Relative humidity may reach a maximum of **100 % (maximum RH)** & **94 % (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
Field Crops			
Rice	Tillering of <i>Main Kharif</i>		- After rains, apply 33kg of urea as top dress at 30days of transplanting after draining out water. Irrigate the crop field after 48hrs of top-dressing and maintain water level of 5-8cm. - Ridges should be well constructed to maintain optimum water level.
		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).
		Gall midge	- For gall midge, spray Fipronil @ 2g/ 15 lit water.
Soybean & Groundnut	Vegetative to flowering/ pegging		- Drainage system may be well constructed around the crop field to avoid water logging as there is likely to have moderate to heavy rains during next five days.
Storage			- 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.
Horticulture Crops			
Cabbage/ Cauliflower/ Broccoli	Nursery		- Land preparation of main field for transplanting may be started after rains. - Prepare temporary rain shelter to protect cauliflower nursery. Proper drainage may be constructed.
French bean & broad bean	Land preparation		Land preparation for sowing french bean or broad bean may be started after rains.
Potato	Land preparation		Land preparation for planting potato as early crop and also for seed purpose may be started after the rains in foothills and upland area. Select the area with fertile and sandy loam soil.
Ginger	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.
Turmeric	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.
Animal Sciences			
Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
Poultry	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.



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“Integrated Agromet Advisory Services”

		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.
		Parasites (external)	Spray Butox liquid @ 2 ml/ lit of water twice a week.
Sheep/ Goat	Above 3 months of age (as and when required)	Enterotoxaemia	Enterotoxaemia vaccination if available (M.C.C.V.) at 5 cc sub-cutaneously.
Pig	Above 3 months of age (as and when required)	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.
Cattle / Buffalo/ Mithun	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.

Fishery:

Type of Farming	Stage	Management	Agro-metrological advisories
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 ^H 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 ^H 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
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“Integrated Agromet Advisory Services”

MANIPUR BULLETIN

14th 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 15th to 19th August, 2014 as given below:

Significant past weather for the preceding bi-weekly of Imphal - West (12th to 14th August, 2014)

During past three days sky was partly cloudy to mainly cloudy. 4.3 mm rainfall was recorded during past three days. Maximum temperature range observed was 31.9 – 33.3 °C, range of minimum temperature observed was 22.2 – 22.4 °C, mean relative humidity observed in morning and afternoon were 85.0 % and 75.0 % respectively. The average wind speed range was 1.3 – 1.7 km/hr.

Weather forecast for next five days of Churachandpur (15th to 19th August, 2014)

There may be moderate to heavy rains upto Tuesday. Sky may be partly cloudy to cloudy with maximum temp. of 31.0 – 32.0 °C & minimum temp. 21.0 – 23.0 °C. Relative humidity may reach a maximum of 100 % (maximum RH) & 86 % (minimum RH). The average wind speed may be 3-6 km/hr during next five days.

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
Field Crops			
Rice	Tillering of Main Kharif		- After rains, apply 33kg of urea as top dress at 30days of transplanting after draining out water. Irrigate the crop field after 48hrs of top-dressing and maintain water level of 5-8cm. - Ridges should be well constructed to maintain optimum water level.
		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).
		Gall midge	- For gall midge, spray Fipronil @ 2g/ 15 lit water.
Soybean & Groundnut	Vegetative to flowering/ pegging		- Drainage system may be well constructed around the crop field to avoid water logging as there is likely to have moderate to heavy rains during next five days.
Storage			- 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.
Horticulture Crops			
Cabbage/ Cauliflower/ Broccoli	Nursery		- Land preparation of main field for transplanting may be started after rains. - Prepare temporary rain shelter to protect cauliflower nursery. Proper drainage may be constructed.
French bean & broad bean	Land preparation		Land preparation for sowing french bean or broad bean may be started after rains.
Potato	Land preparation		Land preparation for planting potato as early crop and also for seed purpose may be started after the rains in foothills and upland area. Select the area with fertile and sandy loam soil.
Ginger	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.
Turmeric	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.
Animal Sciences			
Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
Poultry	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.



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Manipur Centre, Lamphelpat, Imphal - 795 004**



“Integrated Agromet Advisory Services”

		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.
		Parasites (external)	Spray Butox liquid @ 2 ml/ lit of water twice a week.
Sheep/ Goat	Above 3 months of age (as and when required)	Enterotoxaemia	Enterotoxaemia vaccination if available (M.C.C.V.) at 5 cc sub-cutaneously.
Pig	Above 3 months of age (as and when required)	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.
Cattle / Buffalo/ Mithun	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.

Fishery:

Type of Farming	Stage	Management	Agro-metrological advisories
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 ^H 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 ^H 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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MANIPUR BULLETIN

14th 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 15th to 19th August, 2014 as given below:

Significant past weather for the preceding bi-weekly of Imphal - West (12th to 14th August, 2014)

During past three days sky was partly cloudy to mainly cloudy. **4.3 mm** rainfall was recorded during past three days. Maximum temperature range observed was **31.9 – 33.3 °C**, range of minimum temperature observed was **22.2 – 22.4 °C**, mean relative humidity observed in morning and afternoon were **85.0 %** and **75.0 %** respectively. The average wind speed range was **1.3 – 1.7 km/hr**.

Weather forecast for next five days of Imphal-East (15th to 19th August, 2014)

There may be moderate to heavy rains upto Tuesday. Sky may be partly cloudy to cloudy with maximum temp. of **32.0 – 33.0 °C** & minimum temp. **22.0 – 23.0 °C**. Relative humidity may reach a maximum of **100 % (maximum RH)** & **91 % (minimum RH)**. The average wind speed may be **2-3 km/hr** during next five days.

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
Field Crops			
Rice	Tillering of <i>Main Kharif</i>		- After rains, apply 33kg of urea as top dress at 30days of transplanting after draining out water. Irrigate the crop field after 48hrs of top-dressing and maintain water level of 5-8cm. - Ridges should be well constructed to maintain optimum water level.
		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).
		Gall midge	- For gall midge, spray Fipronil @ 2g/ 15 lit water.
Soybean & Groundnut	Vegetative to flowering/ pegging		- Drainage system may be well constructed around the crop field to avoid water logging as there is likely to have moderate to heavy rains during next five days.
Storage			- 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.
Horticulture Crops			
Cabbage/ Cauliflower/ Broccoli	Nursery		- Land preparation of main field for transplanting may be started after rains. - Prepare temporary rain shelter to protect cauliflower nursery. Proper drainage may be constructed.
French bean & broad bean	Land preparation		Land preparation for sowing french bean or broad bean may be started after rains.
Potato	Land preparation		Land preparation for planting potato as early crop and also for seed purpose may be started after the rains in foothills and upland area. Select the area with fertile and sandy loam soil.
Ginger	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.
Turmeric	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.
Animal Sciences			
Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
Poultry	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.



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“Integrated Agromet Advisory Services”

		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.
		Parasites (external)	Spray Butox liquid @ 2 ml/ lit of water twice a week.
Sheep/ Goat	Above 3 months of age (as and when required)	Enterotoxaemia	Enterotoxaemia vaccination if available (M.C.C.V.) at 5 cc sub-cutaneously.
Pig	Above 3 months of age (as and when required)	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.
Cattle / Buffalo/ Mithun	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.

Fishery:

Type of Farming	Stage	Management	Agro-metrological advisories
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 ^H 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 ^H 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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MANIPUR BULLETIN

14th August, 2014

Imphal-West

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During past three days sky was partly cloudy to mainly cloudy. 4.3 mm rainfall was recorded during past three days. Maximum temperature range observed was 31.9 – 33.3 °C, range of minimum temperature observed was 22.2 – 22.4 °C, mean relative humidity observed in morning and afternoon were 85.0 % and 75.0 % respectively. The average wind speed range was 1.3 – 1.7 km/hr.

Weather forecast for next five days of Imphal-West (15th to 19th August, 2014)

There may be moderate to heavy rains upto Tuesday. Sky may be partly cloudy to cloudy with maximum temp. of 31.0 – 33.0 °C & minimum temp. 22.0 – 23.0 °C. Relative humidity may reach a maximum of 100 % (maximum RH) & 93 % (minimum RH). The average wind speed may be 2-4 km/hr during next five days.

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
Field Crops			
Rice	Tillering of <i>Main Kharif</i>		- After rains, apply 33kg of urea as top dress at 30days of transplanting after draining out water. Irrigate the crop field after 48hrs of top-dressing and maintain water level of 5-8cm. - Ridges should be well constructed to maintain optimum water level.
		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).
		Gall midge	- For gall midge, spray Fipronil @ 2g/ 15 lit water.
Soybean & Groundnut	Vegetative to flowering/ pegging		- Drainage system may be well constructed around the crop field to avoid water logging as there is likely to have moderate to heavy rains during next five days.
Storage			- 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.
Horticulture Crops			
Cabbage/ Cauliflower/ Broccoli	Nursery		- Land preparation of main field for transplanting may be started after rains. - Prepare temporary rain shelter to protect cauliflower nursery. Proper drainage may be constructed.
French bean & broad bean	Land preparation		Land preparation for sowing french bean or broad bean may be started after rains.
Potato	Land preparation		Land preparation for planting potato as early crop and also for seed purpose may be started after the rains in foothills and upland area. Select the area with fertile and sandy loam soil.
Ginger	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.
Turmeric	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.
Animal Sciences			
Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
Poultry	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.



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		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.
		Parasites (external)	Spray Butox liquid @ 2 ml/ lit of water twice a week.
Sheep/ Goat	Above 3 months of age (as and when required)	Enterotoxaemia	Enterotoxaemia vaccination if available (M.C.C.V.) at 5 cc sub-cutaneously.
Pig	Above 3 months of age (as and when required)	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.
Cattle / Buffalo/ Mithun	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.

Fishery:

Type of Farming	Stage	Management	Agro-metrological advisories
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 ^H 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 ^H 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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MANIPUR BULLETIN

14th 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 15th to 19th August, 2014 as given below:

Significant past weather for the preceding bi-weekly of Imphal - West (12th to 14th August, 2014)

During past three days sky was partly cloudy to mainly cloudy. **6.3 mm** rainfall was recorded during past three days. Maximum temperature range observed was **31.9 – 33.3 °C**, range of minimum temperature observed was **22.2 – 22.4 °C**, mean relative humidity observed in morning and afternoon were **85.0 %** and **75.0 %** respectively. The average wind speed range was **1.3 – 1.7 km/hr**.

Weather forecast for next five days of Senapati (15th to 19th August, 2014)

There may be moderate to heavy rains upto Tuesday. 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 **100 % (maximum RH)** & **93 % (minimum RH)**. The average wind speed may be **2-3 km/hr** during next five days.

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
Field Crops			
Rice	Tillering of <i>Main Kharif</i>		- After rains, apply 33kg of urea as top dress at 30days of transplanting after draining out water. Irrigate the crop field after 48hrs of top-dressing and maintain water level of 5-8cm. - Ridges should be well constructed to maintain optimum water level.
		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).
		Gall midge	- For gall midge, spray Fipronil @ 2g/ 15 lit water.
Soybean & Groundnut	Vegetative to flowering/ pegging		- Drainage system may be well constructed around the crop field to avoid water logging as there is likely to have moderate to heavy rains during next five days.
Storage			- 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.
Horticulture Crops			
Cabbage/ Cauliflower/ Broccoli	Nursery		- Land preparation of main field for transplanting may be started after rains. - Prepare temporary rain shelter to protect cauliflower nursery. Proper drainage may be constructed.
French bean & broad bean	Land preparation		Land preparation for sowing french bean or broad bean may be started after rains.
Ginger	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.
Turmeric	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.
Animal Sciences			
Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
Poultry	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.
		Parasites (external)	Spray Butox liquid @ 2 ml/ lit of water twice a week.



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



“Integrated Agromet Advisory Services”

Sheep/ Goat	Above 3 months of age (as and when required)	Enterotoxaemia	Enterotoxaemia vaccination if available (M.C.C.V.) at 5 cc sub-cutaneously.
Pig	Above 3 months of age (as and when required)	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.
Cattle / Buffalo/ Mithun	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.

Fishery:

Type of Farming	Stage	Management	Agro-metrological advisories
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 ^H 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 ^H 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

14th 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 15th to 19th August, 2014 as given below:

Significant past weather for the preceding bi-weekly of Imphal - West (12th to 14th August, 2014)

During past three days sky was partly cloudy to mainly cloudy. **4.3 mm** rainfall was recorded during past three days. Maximum temperature range observed was **31.9 – 33.3 °C**, range of minimum temperature observed was **22.2 – 22.4 °C**, mean relative humidity observed in morning and afternoon were **85.0 %** and **75.0 %** respectively. The average wind speed range was **1.3 – 1.7 km/hr**.

Weather forecast for next five days of Tamenglong (15th to 19th August, 2014)

There may be moderate to heavy rains upto Tuesday. Sky may be partly cloudy to cloudy with maximum temp. of **32.0 – 33.0 °C** & minimum temp. **22.0 – 24.0 °C**. Relative humidity may reach a maximum of **100 % (maximum RH)** & **92 % (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
Field Crops			
Rice	Tillering of <i>Main Kharif</i>		- After rains, apply 33kg of urea as top dress at 30days of transplanting after draining out water. Irrigate the crop field after 48hrs of top-dressing and maintain water level of 5-8cm. - Ridges should be well constructed to maintain optimum water level.
		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).
		Gall midge	- For gall midge, spray Fipronil @ 2g/ 15 lit water.
Soybean & Groundnut	Vegetative to flowering/ pegging		- Drainage system may be well constructed around the crop field to avoid water logging as there is likely to have moderate to heavy rains during next five days.
Storage			- 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.
Horticulture Crops			
Cabbage/ Cauliflower/ Broccoli	Nursery		- Land preparation of main field for transplanting may be started after rains. - Prepare temporary rain shelter to protect cauliflower nursery. Proper drainage may be constructed.
French bean & broad bean	Land preparation		Land preparation for sowing french bean or broad bean may be started after rains.
Potato	Land preparation		Land preparation for planting potato as early crop and also for seed purpose may be started after the rains in foothills and upland area. Select the area with fertile and sandy loam soil.
Ginger	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.
Turmeric	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.
Animal Sciences			
Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
Poultry	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.



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



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		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.
		Parasites (external)	Spray Butox liquid @ 2 ml/ lit of water twice a week.
Sheep/ Goat	Above 3 months of age (as and when required)	Enterotoxaemia	Enterotoxaemia vaccination if available (M.C.C.V.) at 5 cc sub-cutaneously.
Pig	Above 3 months of age (as and when required)	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.
Cattle / Buffalo/ Mithun	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.

Fishery:

Type of Farming	Stage	Management	Agro-metrological advisories
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 ^H 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 ^H 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

14th 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 15th to 19th August, 2014 as given below:

Significant past weather for the preceding bi-weekly of Imphal - West (12th to 14th August, 2014)

During past three days sky was partly cloudy to mainly cloudy. **4.3 mm** rainfall was recorded during past three days. Maximum temperature range observed was **31.9 – 33.3 °C**, range of minimum temperature observed was **22.2 – 22.4 °C**, mean relative humidity observed in morning and afternoon were **85.0 %** and **75.0 %** respectively. The average wind speed range was **1.3 – 1.7 km/hr**.

Weather forecast for next five days of Thoubal (15th to 19th August, 2014)

There may be moderate to heavy rains upto Tuesday. Sky may be partly cloudy to cloudy with maximum temp. of **31.0 – 32.0 °C** & minimum temp. **21.0 – 23.0 °C**. Relative humidity may reach a maximum of **100 % (maximum RH)** & **91 % (minimum RH)**. The average wind speed may be **0-4 km/hr** during next five days.

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
Field Crops			
Rice	Tillering of <i>Main Kharif</i>		- After rains, apply 33kg of urea as top dress at 30days of transplanting after draining out water. Irrigate the crop field after 48hrs of top-dressing and maintain water level of 5-8cm. - Ridges should be well constructed to maintain optimum water level.
		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).
		Gall midge	- For gall midge, spray Fipronil @ 2g/ 15 lit water.
Soybean & Groundnut	Vegetative to flowering/ pegging		- Drainage system may be well constructed around the crop field to avoid water logging as there is likely to have moderate to heavy rains during next five days.
Storage			- 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.
Horticulture Crops			
Cabbage/ Cauliflower/ Broccoli	Nursery		- Land preparation of main field for transplanting may be started after rains. - Prepare temporary rain shelter to protect cauliflower nursery. Proper drainage may be constructed.
French bean & broad bean	Land preparation		Land preparation for sowing french bean or broad bean may be started after rains.
Potato	Land preparation		Land preparation for planting potato as early crop and also for seed purpose may be started after the rains in foothills and upland area. Select the area with fertile and sandy loam soil.
Ginger	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.
Turmeric	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.
Animal Sciences			
Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
Poultry	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.



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



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		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.
		Parasites (external)	Spray Butox liquid @ 2 ml/ lit of water twice a week.
Sheep/ Goat	Above 3 months of age (as and when required)	Enterotoxaemia	Enterotoxaemia vaccination if available (M.C.C.V.) at 5 cc sub-cutaneously.
Pig	Above 3 months of age (as and when required)	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.
Cattle / Buffalo/ Mithun	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.

Fishery:

Type of Farming	Stage	Management	Agro-metrological advisories
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 ^H 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 ^H 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

14th 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 15th to 19th August, 2014 as given below:

Significant past weather for the preceding bi-weekly of Imphal - West (12th to 14th August, 2014)

During past three days sky was partly cloudy to mainly cloudy. 6.3 mm rainfall was recorded during past three days. Maximum temperature range observed was 31.9 – 33.3 °C, range of minimum temperature observed was 22.2 – 22.4 °C, mean relative humidity observed in morning and afternoon were 85.0 % and 75.0 % respectively. The average wind speed range was 1.3 – 1.7 km/hr.

Weather forecast for next five days of Ukhrul (15th to 19th August, 2014)

There may be moderate to heavy rains upto Tuesday. Sky may be partly cloudy to cloudy with maximum temp. of 28.0 – 30.0 °C & minimum temp. 18.0 – 20.0 °C. Relative humidity may reach a maximum of 100 % (maximum RH) & 94 % (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
Field Crops			
Rice	Tillering of Main Kharif		- After rains, apply 33kg of urea as top dress at 30days of transplanting after draining out water. Irrigate the crop field after 48hrs of top-dressing and maintain water level of 5-8cm. - Ridges should be well constructed to maintain optimum water level.
		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).
		Gall midge	- For gall midge, spray Fipronil @ 2g/ 15 lit water.
Soybean & Groundnut	Vegetative to flowering/ pegging		- Drainage system may be well constructed around the crop field to avoid water logging as there is likely to have moderate to heavy rains during next five days.
Storage			- 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.
Horticulture Crops			
Cabbage/ Cauliflower/ Broccoli	Nursery		- Land preparation of main field for transplanting may be started after rains. - Prepare temporary rain shelter to protect cauliflower nursery. Proper drainage may be constructed.
French bean & broad bean	Land preparation		Land preparation for sowing french bean or broad bean may be started after rains.
Ginger	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.
Turmeric	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.
Animal Sciences			
Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
Poultry	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.
		Parasites (external)	Spray Butox liquid @ 2 ml/ lit of water twice a week.



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



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Sheep/ Goat	Above 3 months of age (as and when required)	Enterotoxaemia	Enterotoxaemia vaccination if available (M.C.C.V.) at 5 cc sub-cutaneously.
Pig	Above 3 months of age (as and when required)	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.
Cattle / Buffalo/ Mithun	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.

Fishery:

Type of Farming	Stage	Management	Agro-metrological advisories
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 ^H 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 ^H 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

14th 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 15th to 19th August, 2014 as given below:

Significant past weather for the preceding bi-weekly of Imphal - West (12th to 14th August, 2014)

During past three days sky was partly cloudy to mainly cloudy. **4.3 mm** rainfall was recorded during past three days. Maximum temperature range observed was **31.9 – 33.3 °C**, range of minimum temperature observed was **22.2 – 22.4 °C**, mean relative humidity observed in morning and afternoon were **85.0 %** and **75.0 %** respectively. The average wind speed range was **1.3 – 1.7 km/hr**.

Weather forecast for next five days of Bishnupur (15th to 19th August, 2014)

There may be moderate to heavy rains upto Tuesday. 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 **100 % (maximum RH)** & **89 % (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
Field Crops			
Rice	Tillering of <i>Main Kharif</i>		- After rains, apply 33kg of urea as top dress at 30days of transplanting after draining out water. Irrigate the crop field after 48hrs of top-dressing and maintain water level of 5-8cm. - Ridges should be well constructed to maintain optimum water level.
		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).
		Gall midge	- For gall midge, spray Fipronil @ 2g/ 15 lit water.
Soybean & Groundnut	Vegetative to flowering/ pegging		- Drainage system may be well constructed around the crop field to avoid water logging as there is likely to have moderate to heavy rains during next five days.
Storage			- 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.
Horticulture Crops			
Cabbage/ Cauliflower/ Broccoli	Nursery		- Land preparation of main field for transplanting may be started after rains. - Prepare temporary rain shelter to protect cauliflower nursery. Proper drainage may be constructed.
French bean & broad bean	Land preparation		Land preparation for sowing french bean or broad bean may be started after rains.
Potato	Land preparation		Land preparation for planting potato as early crop and also for seed purpose may be started after the rains in foothills and upland area. Select the area with fertile and sandy loam soil.
Ginger	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.
Turmeric	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.
Animal Sciences			
Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
Poultry	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.



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



“Integrated Agromet Advisory Services”

		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.
		Parasites (external)	Spray Butox liquid @ 2 ml/ lit of water twice a week.
Sheep/ Goat	Above 3 months of age (as and when required)	Enterotoxaemia	Enterotoxaemia vaccination if available (M.C.C.V.) at 5 cc sub-cutaneously.
Pig	Above 3 months of age (as and when required)	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.
Cattle / Buffalo/ Mithun	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.

Fishery:

Type of Farming	Stage	Management	Agro-metrological advisories
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 ^H 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 ^H 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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