E-mail: agromet\_mnp@yahoo.co.uk



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



### "Integrated Agromet Advisory Services"

## MANIPUR BULLETIN 2<sup>nd</sup> September, 2014

#### Churachandpur

Significant past weather for the preceding bi-weekly of	<u>Weather forecast</u> for next five days of Churachandpur
Imphal - West (2 <sup>nd</sup> to 4 <sup>th</sup> September, 2014)	( $6^{th}$ to $10^{th}$ September, 2014)
During past three days sky was partly cloudy to mainly cloudy but mainly clear during morning hours of $29^{\text{th}}$ August. <b>15.9</b> <b>mm</b> rainfall was recorded during past three days. Maximum temperature range observed was $30.2 - 32.8$ °C, range of minimum temperature observed was $20.8 - 22.8$ °C, mean relative humidity observed in morning and afternoon were 84.3 % and $73.3$ % respectively. The average wind speed range was $0.3 - 0.4$ km/hr.	There may be light to moderate rain upto Wednesday. Sky may be partly cloudy to mainly cloudy with maximum temp. of $30.0 - 32.0$ °C & minimum temp. $20.0 - 22.0$ °C. Relative humidity may reach a maximum of 100 % (maximum RH) & 85 % (minimum RH). The average wind speed may be 0-3 km/hr during next five days.

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
-	tions/ weeding, appl	ication of fertilizer a	nd spray of insecticides/ pesticides may be done before rains.
Field Crops			
Kharif Rice			- Maintain water level of 5-8cm.
	Tillering to		- Weeding may be done before top dressing.
	Panicle initiation		- Apply 33 kg Urea/ha at panicle initiation stage after complete removal of water. Irrigate field after 48 hrs of top dressing and maintain water level at 5-8 cm. If there are insect pest infestations avoid fertilizer application.
		Gall midge	- If gall midge infestation is observed then drain out water completely and apply the following : At early stage of gall midge infestation, spray Fipronil @ 2g/ 15 lit water or Thiomethoxam @ 5g/15 lit of water (i.e., 100g of Thiomethoxam per ha). If it is severe then use Forate @ 4kg per sangam.
		Aphid	Spray Fipronil @ 2g/pump or Imidachloprid 17.8 SL @ 7 ml/ 15 litres.
		Leaf folder, plant	Spray Coragen @ 3ml/15 lit of water or Lambdacyhothrin @ 15ml/ 15
		hopper	litre of water (at least three pumps per sangam).
Soybean	Flowering to	- Rust	- Spray Mancozeb 75% WP @ 1.25 to 2 kg/ ha at 7 to 10 days interval.
	fruiting and pod	- Hairy caterpillar	- Spray Chloropyriphos 20 EC @ 2.5 ml/ lit of water.
	formation	5 1	- Weeding may be done to avoid hairy caterpillar.
Groundnut	Pod formation		- Hand weeding should be done to prevent hairy caterpillar and other insect pest.
		Tikka disease	- Spray Carbendazim @ 0.5g / lit of water.
Blackgram	Vegetative	Hairy caterpillar	Spray Chloropyriphos 20 EC @ 2.5 ml/ lit of water.
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			
Ginger/ Turmeric	Rhizome initiation		- Apply Phosphate solubilizing bacteria @ 3-5kg/ acre (1.6 sangam) with compost in soil as bio-fertilizer.
			- Avoid water logging in and around the crop field.
Turmeric	Rhizome	Taphrina Leaf	- For Taphrina Leaf Blotch and other leaf spot diseases apply
	initiation	Blotch and other leaf spot diseases	Trichoderma harzianum @ 5-10gm/ litre water as foliar spray and in soil drenching.



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Onion/ Tom	nato	Nursery		- Raise nurseries of onion & tomato under polyhouses.	
Cabbage/		Land		- Prepare main field for transplanting raised cole crops nurseries.	
Cauliflower	·/	preparation for		- Apply 5 tones (10cart loads) of FYM, 50 kg DAP, 25 Kg MOP as basal	
Broccoli		transplanting		dose.	
Citrus (Lim lemon/ oran		Nursery	Citrus Psylla	- Spray Imidachloprid 70% W.G. (Admire) @0.5g/ litre of water or Nuvan @ 0.5ml/litre of water.	
	8 /		Powdery Mildew	- Spray Mirador (Azoxystrobin023%) @ 1ml/litre of water or Bayleton @ 7g/15 litre water.	
French Bean,       Land         Broad bean & Pea       preparation         Animal Sciences       Image: Content of the second seco			Land preparation for sowing of french bean, broad bean and pea may be done. Recommended varieties for French bean are – Pant Anupam, Anupam (to be planted at a spacing of 30cm x 45cm) and Tangkhul Hawai (local) (to be planted at a spacing of 30cm x 60cm with 2-3 seeds per hill). For broad bean, plant local variety at a spacing of 30cm x 45cm. And for pea, Arkel or Azad may be planted at a spacing of 10 cm x 30cm.		
<u>Animal Sci</u> Name of the an		Growth stage	Disease/ infestation	A and material advisories	
		8		Agro-meteorological advisories	
				logging around the sheds as it may help in mosquito breeding. nd aroung the birds/ animals sheds.	
	asures t	All susceptible age	Ranikhet disease		
Poultry		groups (as and when		Vaccinate against Ranikhet disease.	
		required)	Coccidiosis	Give Amprolium powder @ 2 g/ lit of drinking water for 7days along with glucose.	
			Deworming	Give Piperazine liquid @ 40 for 100 adult birds ( $30ml$ on $1^{st}$ day and $10ml$ on $2^{nd}$ day).	
			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)		Deworming	Give Albendazole liquid.	
Pig		Above 3 months of age (as and when	Coccidial infection (Diarrhea)	Ofloxacine tab twice daily for 5 days.	
		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 / Buffa	alo/	Above 3 months of	Skin infection	Apply Himax ointment on the affected portion two times daily.	
Mithun		age (as and when required)	Deworming	Give Albendazole liquid.	
Fishery:		1 /			
Type of Farming	Stage	Management	Agro-metrological advisories		
Carp/	out/ maintained at 1.0-1.5m.			from unwanted vegetation and insects and water depth should be	
Catfish			<ul> <li>maintained at 1.0-1.5m.</li> <li>Feeds should be provided 2-3 times a day @ 5-10% body weight per day.</li> <li>Well balanced feed fortified with vitamins and minerals should be provided.</li> <li>Apply Green AQ @ 4litre/ ha or lime @ 200kg/ ha.</li> </ul>		
culture nurser		ries			
				ngs/ha can be stocked. Sampling of fish should be done by regular netting.	
Paddy cum fish culture	ım fish		- 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 2<sup>nd</sup> September, 2014

#### Imphal-East

Significant past weather for the preceding bi-weekly of	Weather forecast for next five days of Imphal-East
Imphal - West (2 <sup>nd</sup> to 4 <sup>th</sup> September, 2014)	(6 <sup>th</sup> to 10 <sup>th</sup> September, 2014)
During past three days sky was partly cloudy to mainly cloudy but mainly clear during morning hours of $29^{\text{th}}$ August. <b>15.9</b> <b>mm</b> rainfall was recorded during past three days. Maximum temperature range observed was $30.2 - 32.8$ °C, range of minimum temperature observed was $20.8 - 22.8$ °C, mean relative humidity observed in morning and afternoon were 84.3 % and $73.3$ % respectively. The average wind speed range was $0.3 - 0.4$ km/hr.	There may be light to moderate rain upto Wednesday. Sky may be partly cloudy to mainly 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) & 85 % (minimum RH). The average wind speed may be 0-3 km/hr during next five days.

* Seedling of late variety	RC Maninhou 7	is available at ICAR.	RC Maninur Centre	I amnhelnat
Securing of the variet	у КС тапірной /	is available at ICAN	•nc manipur centre,	ситрпетри

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
Interculture operat	tions/ weeding, appl	ication of fertilizer a	nd spray of insecticides/ pesticides may be done before rains.
Field Crops			
Kharif Rice	Tillering to Panicle initiation		<ul> <li>Maintain water level of 5-8cm.</li> <li>Weeding may be done before top dressing.</li> <li>Apply 33 kg Urea/ha at panicle initiation stage after complete removal of water. Irrigate field after 48 hrs of top dressing and maintain water level at 5-8 cm. If there are insect pest infestations avoid fertilizer application.</li> </ul>
		Gall midge	<ul> <li>If gall midge infestation is observed then drain out water completely and apply the following :</li> <li>At early stage of gall midge infestation, spray Fipronil @ 2g/ 15 lit water or Thiomethoxam @ 5g/15 lit of water (i.e., 100g of Thiomethoxam per ha). If it is severe then use Forate @ 4kg per sangam.</li> </ul>
		Aphid	Spray Fipronil @ 2g/pump or Imidachloprid 17.8 SL @ 7 ml/ 15 litres.
		Leaf folder, plant hopper	Spray Coragen @ 3ml/15 lit of water or Lambdacyhothrin @ 15ml/ 15 litre of water (at least three pumps per sangam).
Soybean	Flowering to fruiting and pod formation	- Rust - Hairy caterpillar	<ul> <li>Spray Mancozeb 75% WP @ 1.25 to 2 kg/ ha at 7 to 10 days interval.</li> <li>Spray Chloropyriphos 20 EC @ 2.5 ml/ lit of water.</li> <li>Weeding may be done to avoid hairy caterpillar.</li> </ul>
Groundnut	Pod formation		- Hand weeding should be done to prevent hairy caterpillar and other insect pest.
		Tikka disease	- Spray Carbendazim @ 0.5g / lit of water.
Blackgram Storage	Vegetative	Hairy caterpillar	<ul> <li>Spray Chloropyriphos 20 EC @ 2.5 ml/ lit of water.</li> <li>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.</li> </ul>
Horticulture Crops	_]	1	
Ginger/ Turmeric	Rhizome initiation		<ul> <li>Apply Phosphate solubilizing bacteria @ 3-5kg/ acre (1.6 sangam) with compost in soil as bio-fertilizer.</li> <li>Avoid water logging in and around the crop field.</li> </ul>
Turmeric	Rhizome initiation	Taphrina Leaf Blotch and other leaf spot diseases	<ul> <li>For Taphrina Leaf Blotch and other leaf spot diseases apply Trichoderma harzianum @ 5-10gm/ litre water as foliar spray and in soil drenching.</li> </ul>



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<b>Onion/ Tom</b>	nato	Nursery		- Raise nurseries of onion & tomato under polyhouses.	
Cabbage/		Land		- Prepare main field for transplanting raised cole crops nurseries.	
Cauliflower	·/	preparation for		- Apply 5 tones (10cart loads) of FYM, 50 kg DAP, 25 Kg MOP as basa	
Broccoli		transplanting		dose.	
Citrus (Lim lemon/ oran		Nursery	Citrus Psylla	- Spray Imidachloprid 70% W.G. (Admire) @0.5g/ litre of water on Nuvan @ 0.5ml/litre of water.	
	8 /		Powdery Mildew	- Spray Mirador (Azoxystrobin023%) @ 1ml/litre of water or Bayletor @ 7g/15 litre water.	
French Bean, Broad bean & Pea preparation			Land preparation for sowing of french bean, broad bean and pea may be done. Recommended varieties for French bean are – Pant Anupam, Anupam (to be planted at a spacing of 30cm x 45cm) and Tangkhul Hawai (local) (to be planted at a spacing of 30cm x 60cm with 2-3 seeds per hill). For broad bean, plant local variety at a spacing of 30cm x 45cm. And for pea, Arkel or Azad may be planted at a spacing of 10 cm x 30cm.		
Animal Scie		Growth stage	Disease/ infestation	Agro-meteorological advisories	
				5 6	
				logging around the sheds as it may help in mosquito breeding. nd aroung the birds/ animals sheds.	
Poultry	asui es t	All susceptible age	Ranikhet disease	Vaccinate against Ranikhet disease.	
lountry		groups (as and when required)		Give Amprolium powder @ 2 g/ lit of drinking water for 7days along with glucose.	
			Deworming	Give Piperazine liquid @ 40 for 100 adult birds ( $30ml$ on $1^{st}$ day and $10ml$ on $2^{nd}$ day).	
			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.	
age (as and when required) Pig Above 3 months		Above 3 months of age (as and when required) Above 3 months of age (as and when	Deworming Coccidial infection (Diarrhea)	Give Albendazole liquid. Ofloxacine tab twice daily for 5 days.	
		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	
			TICKS	while brushing the animal.	
				Give mineral mixture like Vimicon and Ascagold suspension in pregnant	
				sow @ 20g and 20ml resp. in feed.	
Cattle / Buffa	alo/	Above 3 months of	Skin infection	Apply Himax ointment on the affected portion two times daily.	
Mithun		age (as and when required)	Deworming	Give Albendazole liquid.	
Fishery:			-	,	
Type of	Stage	Management	Agro-metrological advisories		
Farming Carp/	Grow	_	- Ponds should be free from unwanted vegetation and insects and water depth should be		
Carp/ Catfish			maintained at 1.0-1.5m.		
culture out/ nurseries		- Feeds should be provided 2-3 times a day @ 5-10% body weight per day.			
			<ul> <li>- Feeds should be provided 2-5 times a day @ 5-10% body weight per day.</li> <li>- Well balanced feed fortified with vitamins and minerals should be provided.</li> <li>- Apply Green AQ @ 4litre/ ha or lime @ 200kg/ ha.</li> </ul>		
Paddy   Water management     cum fish		<ul> <li>- 8000-10,000 fingerlings/ha can be stocked. Sampling of fish should be done by regular netting.</li> <li>- 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.</li> </ul>			

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### "Integrated Agromet Advisory Services"

## MANIPUR BULLETIN 2<sup>nd</sup> September, 2014

#### Imphal-West

Significant past weather for the preceding bi-weekly of Imphal - West (2 <sup>nd</sup> to 4 <sup>th</sup> September, 2014)	<u>Weather forecast</u> for next five days of Imphal-West $(6^{th} to 10^{th} September, 2014)$
During past three days sky was partly cloudy to mainly cloudy but mainly clear during morning hours of $29^{\text{th}}$ August. <b>15.9</b> <b>mm</b> rainfall was recorded during past three days. Maximum temperature range observed was $30.2 - 32.8$ °C, range of minimum temperature observed was $20.8 - 22.8$ °C, mean relative humidity observed in morning and afternoon were 84.3 % and $73.3$ % respectively. The average wind speed range was $0.3 - 0.4$ km/hr.	There may be light to moderate rain upto Wednesday. Sky may be partly cloudy to mainly cloudy with maximum temp. of $31.0 - 33.0$ °C & minimum temp. $20.0 - 22.0$ °C. Relative humidity may reach a maximum of 100 % (maximum RH) & 78 % (minimum RH). The average wind speed may be 0-2 km/hr during next five days.

* Seedling of late variety RC Maniphou 7 is available at ICAR-RC Manipur Centre, Lamphelpat
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Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
Interculture operat	tions/ weeding, appl	ication of fertilizer a	nd spray of insecticides/ pesticides may be done before rains.
Field Crops			
Kharif Rice	Tillering to Panicle initiation		<ul> <li>Maintain water level of 5-8cm.</li> <li>Weeding may be done before top dressing.</li> <li>Apply 33 kg Urea/ha at panicle initiation stage after complete removal of water. Irrigate field after 48 hrs of top dressing and maintain water level at 5-8 cm. If there are insect pest infestations avoid fertilizer application.</li> </ul>
		Gall midge	<ul> <li>If gall midge infestation is observed then drain out water completely and apply the following :</li> <li>At early stage of gall midge infestation, spray Fipronil @ 2g/ 15 lit water or Thiomethoxam @ 5g/15 lit of water (i.e., 100g of Thiomethoxam per ha). If it is severe then use Forate @ 4kg per sangam.</li> </ul>
		Aphid	Spray Fipronil @ 2g/pump or Imidachloprid 17.8 SL @ 7 ml/ 15 litres.
		Leaf folder, plant hopper	Spray Coragen @ 3ml/15 lit of water or Lambdacyhothrin @ 15ml/ 15 litre of water (at least three pumps per sangam).
Soybean	Flowering to fruiting and pod formation	- Rust - Hairy caterpillar	<ul> <li>Spray Mancozeb 75% WP @ 1.25 to 2 kg/ ha at 7 to 10 days interval.</li> <li>Spray Chloropyriphos 20 EC @ 2.5 ml/ lit of water.</li> <li>Weeding may be done to avoid hairy caterpillar.</li> </ul>
Groundnut	Pod formation		- Hand weeding should be done to prevent hairy caterpillar and other insect pest.
		Tikka disease	- Spray Carbendazim @ 0.5g / lit of water.
Blackgram Storage	Vegetative	Hairy caterpillar	<ul> <li>Spray Chloropyriphos 20 EC @ 2.5 ml/ lit of water.</li> <li>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.</li> </ul>
Horticulture Crops	_]	1	
Ginger/ Turmeric	Rhizome initiation		<ul> <li>Apply Phosphate solubilizing bacteria @ 3-5kg/ acre (1.6 sangam) with compost in soil as bio-fertilizer.</li> <li>Avoid water logging in and around the crop field.</li> </ul>
Turmeric	Rhizome initiation	Taphrina Leaf Blotch and other leaf spot diseases	<ul> <li>For Taphrina Leaf Blotch and other leaf spot diseases apply Trichoderma harzianum @ 5-10gm/ litre water as foliar spray and in soil drenching.</li> </ul>



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<b>Onion/ Tom</b>	nato	Nursery		- Raise nurseries of onion & tomato under polyhouses.	
Cabbage/		Land		- Prepare main field for transplanting raised cole crops nurseries.	
Cauliflower	·/	preparation for		- Apply 5 tones (10cart loads) of FYM, 50 kg DAP, 25 Kg MOP as basa	
Broccoli		transplanting		dose.	
Citrus (Lim lemon/ oran		Nursery	Citrus Psylla	- Spray Imidachloprid 70% W.G. (Admire) @0.5g/ litre of water on Nuvan @ 0.5ml/litre of water.	
	8 /		Powdery Mildew	- Spray Mirador (Azoxystrobin023%) @ 1ml/litre of water or Bayletor @ 7g/15 litre water.	
French Bean, Broad bean & Pea preparation			Land preparation for sowing of french bean, broad bean and pea may be done. Recommended varieties for French bean are – Pant Anupam, Anupam (to be planted at a spacing of 30cm x 45cm) and Tangkhul Hawai (local) (to be planted at a spacing of 30cm x 60cm with 2-3 seeds per hill). For broad bean, plant local variety at a spacing of 30cm x 45cm. And for pea, Arkel or Azad may be planted at a spacing of 10 cm x 30cm.		
Animal Scie		Growth stage	Disease/ infestation	Agro-meteorological advisories	
				5 6	
				logging around the sheds as it may help in mosquito breeding. nd aroung the birds/ animals sheds.	
Poultry	asui es t	All susceptible age	Ranikhet disease	Vaccinate against Ranikhet disease.	
lountry		groups (as and when required)		Give Amprolium powder @ 2 g/ lit of drinking water for 7days along with glucose.	
			Deworming	Give Piperazine liquid @ 40 for 100 adult birds ( $30ml$ on $1^{st}$ day and $10ml$ on $2^{nd}$ day).	
			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.	
age (as and when required) Pig Above 3 months		Above 3 months of age (as and when required) Above 3 months of age (as and when	Deworming Coccidial infection (Diarrhea)	Give Albendazole liquid. Ofloxacine tab twice daily for 5 days.	
		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	
			TICKS	while brushing the animal.	
				Give mineral mixture like Vimicon and Ascagold suspension in pregnant	
				sow @ 20g and 20ml resp. in feed.	
Cattle / Buffa	alo/	Above 3 months of	Skin infection	Apply Himax ointment on the affected portion two times daily.	
Mithun		age (as and when required)	Deworming	Give Albendazole liquid.	
Fishery:			-	,	
Type of	Stage	Management	Agro-metrological advisories		
Farming Carp/	Grow	_	- Ponds should be free from unwanted vegetation and insects and water depth should be		
Carp/ Catfish			maintained at 1.0-1.5m.		
culture out/ nurseries		- Feeds should be provided 2-3 times a day @ 5-10% body weight per day.			
			<ul> <li>- Feeds should be provided 2-5 times a day @ 5-10% body weight per day.</li> <li>- Well balanced feed fortified with vitamins and minerals should be provided.</li> <li>- Apply Green AQ @ 4litre/ ha or lime @ 200kg/ ha.</li> </ul>		
Paddy   Water management     cum fish		<ul> <li>- 8000-10,000 fingerlings/ha can be stocked. Sampling of fish should be done by regular netting.</li> <li>- 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.</li> </ul>			

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



### "Integrated Agromet Advisory Services"

## MANIPUR BULLETIN 2<sup>nd</sup> September, 2014

#### Senapati

Significant past weather for the preceding bi-weekly of	Weather forecast for next five days of Senapati
Imphal - West (2 <sup>nd</sup> to 4 <sup>th</sup> September, 2014)	(6 <sup>th</sup> to 10 <sup>th</sup> September, 2014)
During past three days sky was partly cloudy to mainly cloudy but mainly clear during morning hours of $29^{\text{th}}$ August. <b>15.9</b> <b>mm</b> rainfall was recorded during past three days. Maximum temperature range observed was $30.2 - 32.8$ °C, range of minimum temperature observed was $20.8 - 22.8$ °C, mean relative humidity observed in morning and afternoon were 84.3 % and $73.3$ % respectively. The average wind speed range was $0.3 - 0.4$ km/hr.	There may be light to moderate rain upto Wednesday. Sky may be partly cloudy to mainly cloudy with maximum temp. of $28.0 - 30.0$ °C & minimum temp. $17.0 - 20.0$ °C. Relative humidity may reach a maximum of 99 % (maximum RH) & 79 % (minimum RH). The average wind speed may be 2 km/hr during next five days.

* Seedling of late variety	RC Maninhou 7	is available at $ICAP_{-}$	RC Maninur Contro	I amphalpat
Securing of the variety	KC Maniphou /	is available at ICAN-	'NC manipur Centre,	ситрпетри

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
-	tions/ weeding, appl	ication of fertilizer a	nd spray of insecticides/ pesticides may be done before rains.
Field Crops			
Kharif Rice			- Maintain water level of 5-8cm.
	Tillering to Panicle initiation		<ul> <li>Weeding may be done before top dressing.</li> <li>Apply 33 kg Urea/ha at panicle initiation stage after complete removal of water. Irrigate field after 48 hrs of top dressing and maintain water level at 5-8 cm. If there are insect pest infestations avoid fertilizer application.</li> </ul>
		Gall midge	<ul> <li>If gall midge infestation is observed then drain out water completely and apply the following :</li> <li>At early stage of gall midge infestation, spray Fipronil @ 2g/ 15 lit water or Thiomethoxam @ 5g/15 lit of water (i.e., 100g of Thiomethoxam per ha). If it is severe then use Forate @ 4kg per sangam.</li> </ul>
		Aphid	Spray Fipronil @ 2g/pump or Imidachloprid 17.8 SL @ 7 ml/ 15 litres.
		Leaf folder, plant hopper	Spray Coragen @ 3ml/15 lit of water or Lambdacyhothrin @ 15ml/15 litre of water (at least three pumps per sangam).
Soybean	Flowering to fruiting and pod formation	- Rust - Hairy caterpillar	<ul> <li>Spray Mancozeb 75% WP @ 1.25 to 2 kg/ ha at 7 to 10 days interval.</li> <li>Spray Chloropyriphos 20 EC @ 2.5 ml/ lit of water.</li> <li>Weeding may be done to avoid hairy caterpillar.</li> </ul>
Groundnut	Pod formation		- Hand weeding should be done to prevent hairy caterpillar and other insect pest.
		Tikka disease	- Spray Carbendazim @ 0.5g / lit of water.
Blackgram	Vegetative	Hairy caterpillar	Spray Chloropyriphos 20 EC @ 2.5 ml/ lit of water.
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	_,		, • • • •
Ginger/ Turmeric	Rhizome initiation		<ul> <li>Apply Phosphate solubilizing bacteria @ 3-5kg/ acre (1.6 sangam) with compost in soil as bio-fertilizer.</li> <li>Avoid water logging in and around the crop field.</li> </ul>
Turmeric	Rhizome initiation	Taphrina Leaf Blotch and other leaf spot diseases	<ul> <li>For Taphrina Leaf Blotch and other leaf spot diseases apply Trichoderma harzianum @ 5-10gm/ litre water as foliar spray and in soil drenching.</li> </ul>



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



Onion/ Tom	nato	Nursery		- Raise nurseries of onion & tomato under polyhouses.	
Cabbage/		Land		- Prepare main field for transplanting raised cole crops nurseries.	
Cauliflower	·/	preparation for		- Apply 5 tones (10cart loads) of FYM, 50 kg DAP, 25 Kg MOP as basa	
Broccoli		transplanting		dose.	
Citrus (Lim lemon/ oran		Nursery	Citrus Psylla	- Spray Imidachloprid 70% W.G. (Admire) @0.5g/ litre of water of Nuvan @ 0.5ml/litre of water.	
	0 /		Powdery Mildew	- Spray Mirador (Azoxystrobin023%) @ 1ml/litre of water or Bayletor @ 7g/15 litre water.	
French Bean,     Land       Broad bean & Pea     preparation			Land preparation for sowing of french bean, broad bean and pea may be done. Recommended varieties for French bean are – Pant Anupam, Anupam (to be planted at a spacing of 30cm x 45cm) and Tangkhul Hawai (local) (to be planted at a spacing of 30cm x 60cm with 2-3 seeds per hill). For broad bean, plant local variety at a spacing of 30cm x 45cm. And for pea, Arkel or Azad may be planted at a spacing of 10 cm x 30cm.		
Animal Sci Name of the an		Growth stage	Disease/ infestation	Agro-meteorological advisories	
				logging around the sheds as it may help in mosquito breeding. nd aroung the birds/ animals sheds.	
Poultry		All susceptible age	Ranikhet disease	Vaccinate against Ranikhet disease.	
I outri y		groups (as and when required)		Give Amprolium powder @ 2 g/ lit of drinking water for 7days along with glucose.	
			Deworming	Give Piperazine liquid @ 40 for 100 adult birds ( $30ml$ on $1^{st}$ day and $10ml$ on $2^{nd}$ day).	
			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.	
age requ Pig Abo		Above 3 months of age (as and when required) Above 3 months of age (as and when	Deworming Coccidial infection (Diarrhea)	Give Albendazole liquid. Ofloxacine tab twice daily for 5 days.	
		required)	Deworming	- Deworming against Helminth parasites using Piperazine citrate @ 30	
			Ticks	ml per adult animal once. Add Putor liquid $@ 2 ml/lit of water and use the solution twice a weak$	
			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 / Buffa	alo/	Above 3 months of	Skin infection	Apply Himax ointment on the affected portion two times daily.	
Mithun		age (as and when required)	Deworming	Give Albendazole liquid.	
Fishery:				,	
Type of Farming	Stage	Management	Agro-metrological advisories		
Carp/	Grow	-	- Ponds should be free from unwanted vegetation and insects and water depth should be		
Catfish	out/		maintained at 1.0-1.5m.		
culture	nurse	ries	<ul> <li>Feeds should be provided 2-3 times a day @ 5-10% body weight per day.</li> <li>Well balanced feed fortified with vitamins and minerals should be provided.</li> </ul>		
				4litre/ ha or lime @ 200kg/ ha.	
				ngs/ha can be stocked. Sampling of fish should be done by regular netting.	
Paddy Water management cum fish culture		<ul> <li>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.</li> </ul>			

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



### "Integrated Agromet Advisory Services"

## MANIPUR BULLETIN 2<sup>nd</sup> September, 2014

#### Tamenglong

Significant past weather for the preceding bi-weekly of Imphal - West (2 <sup>nd</sup> to 4 <sup>th</sup> September, 2014)	Weather forecast for next five days of Tamenglong $(6^{th} \text{ to } 10^{th} \text{ September, } 2014)$
During past three days sky was partly cloudy to mainly cloudy but mainly clear during morning hours of $29^{\text{th}}$ August. <b>15.9</b> <b>mm</b> rainfall was recorded during past three days. Maximum temperature range observed was $30.2 - 32.8$ °C, range of minimum temperature observed was $20.8 - 22.8$ °C, mean relative humidity observed in morning and afternoon were 84.3 % and $73.3$ % respectively. The average wind speed range was $0.3 - 0.4$ km/hr.	There may be light to moderate rain upto Wednesday. Sky may be partly cloudy to mainly 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) & 74 % (minimum RH). The average wind speed may be 0-2 km/hr during next five days.

* Seedling of late variety	RC Maniphou 7 is	available at ICAR-RC Ma	nipur Centre. Lamphelpat
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Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
-	tions/ weeding, appl	ication of fertilizer a	nd spray of insecticides/ pesticides may be done before rains.
Field Crops			
Kharif Rice			- Maintain water level of 5-8cm.
	Tillering to		- Weeding may be done before top dressing.
	Panicle initiation		- Apply 33 kg Urea/ha at panicle initiation stage after complete removal of water. Irrigate field after 48 hrs of top dressing and maintain water level at 5-8 cm. If there are insect pest infestations avoid fertilizer application.
		Gall midge	<ul> <li>If gall midge infestation is observed then drain out water completely and apply the following :</li> <li>At early stage of gall midge infestation, spray Fipronil @ 2g/ 15 lit water or Thiomethoxam @ 5g/15 lit of water (i.e., 100g of Thiomethoxam per ha). If it is severe then use Forate @ 4kg per sangam.</li> </ul>
		Aphid	Spray Fipronil @ 2g/pump or Imidachloprid 17.8 SL @ 7 ml/ 15 litres.
		Leaf folder, plant	Spray Coragen @ 3ml/15 lit of water or Lambdacyhothrin @ 15ml/ 15
		hopper	litre of water (at least three pumps per sangam).
Soybean	Flowering to	- Rust	- Spray Mancozeb 75% WP @ 1.25 to 2 kg/ ha at 7 to 10 days interval.
	fruiting and pod	- Hairy caterpillar	- Spray Chloropyriphos 20 EC @ 2.5 ml/ lit of water.
	formation		- Weeding may be done to avoid hairy caterpillar.
Groundnut	Pod formation		- Hand weeding should be done to prevent hairy caterpillar and other insect pest.
		Tikka disease	- Spray Carbendazim @ 0.5g / lit of water.
Blackgram	Vegetative	Hairy caterpillar	Spray Chloropyriphos 20 EC @ 2.5 ml/ lit of water.
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		1	
<b>Ginger/ Turmeric</b>	Rhizome		- Apply Phosphate solubilizing bacteria @ 3-5kg/ acre (1.6 sangam) with
5	initiation		compost in soil as bio-fertilizer.
			- Avoid water logging in and around the crop field.
Turmeric	Rhizome	Taphrina Leaf	- For Taphrina Leaf Blotch and other leaf spot diseases apply
	initiation	Blotch and other	Trichoderma harzianum @ 5-10gm/ litre water as foliar spray and in soil
		leaf spot diseases	drenching.



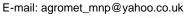
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Onion/ Tom	nato	Nursery		- Raise nurseries of onion & tomato under polyhouses.	
Cabbage/		Land	- Prepare main field for transplanting raised cole crops nurseries.		
Cauliflower	·/	preparation for		- Apply 5 tones (10cart loads) of FYM, 50 kg DAP, 25 Kg MOP as basa	
Broccoli		transplanting		dose.	
Citrus (Lim lemon/ oran		Nursery	Citrus Psylla	- Spray Imidachloprid 70% W.G. (Admire) @0.5g/ litre of water of Nuvan @ 0.5ml/litre of water.	
	0 /		Powdery Mildew	- Spray Mirador (Azoxystrobin023%) @ 1ml/litre of water or Bayletor @ 7g/15 litre water.	
French Bean,     Land       Broad bean & Pea     preparation				Land preparation for sowing of french bean, broad bean and pea may be done. Recommended varieties for French bean are – Pant Anupam, Anupam (to be planted at a spacing of 30cm x 45cm) and Tangkhul Hawai (local) (to be planted at a spacing of 30cm x 60cm with 2-3 seeds per hill). For broad bean, plant local variety at a spacing of 30cm x 45cm. And for pea, Arkel or Azad may be planted at a spacing of 10 cm x 30cm.	
Animal Sci Name of the ar		Crearth stars	Discourt infortation		
		Growth stage	Disease/ infestation	Agro-meteorological advisories	
				logging around the sheds as it may help in mosquito breeding.	
	easures	All susceptible age	Ranikhet disease	nd aroung the birds/ animals sheds.	
Poultry		groups (as and when		Vaccinate against Ranikhet disease.	
		required)	Coccidiosis	Give Amprolium powder @ 2 g/ lit of drinking water for 7days along with glucose.	
			Deworming	Give Piperazine liquid @ 40 for 100 adult birds (30ml on $1^{st}$ day and 10ml on $2^{nd}$ day).	
			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	Sheep/ Goat Above 3 months of age (as and when		Deworming	Give Albendazole liquid.	
Pig		required)Above 3 months of age (as and when	Coccidial infection (Diarrhea)	Ofloxacine tab twice daily for 5 days.	
		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 / Buffa	alo/	Above 3 months of	Skin infection	Apply Himax ointment on the affected portion two times daily.	
Mithun		age (as and when required)	Deworming	Give Albendazole liquid.	
Fishery:					
Type of Farming	Stage	Management	Agro-metrological advisories		
Carp/	Grow	-	- Ponds should be free from unwanted vegetation and insects and water depth should be		
Catfish	out/	.	maintained at 1.0-1.5m.		
culture	nurse	ries	<ul> <li>Feeds should be provided 2-3 times a day @ 5-10% body weight per day.</li> <li>Well balanced feed fortified with vitamins and minerals should be provided.</li> </ul>		
				4litre/ ha or lime @ 200kg/ ha.	
	-			ngs/ha can be stocked. Sampling of fish should be done by regular netting.	
PaddyWater managementcum fishculture			ter depth of the trenches in paddy field. Provide rice bran and mustard oil entary feed. Avoid insecticide/pesticide application.		

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## "Integrated Agromet Advisory Services"

## MANIPUR BULLETIN 2<sup>nd</sup> September, 2014

#### Thoubal

Significant past weather for the preceding bi-weekly of	Weather forecast for next five days of Thoubal
Imphal - West (2 <sup>nd</sup> to 4 <sup>th</sup> September, 2014)	(6 <sup>th</sup> to 10 <sup>th</sup> September, 2014)
During past three days sky was partly cloudy to mainly cloudy but mainly clear during morning hours of $29^{\text{th}}$ August. <b>15.9</b> <b>mm</b> rainfall was recorded during past three days. Maximum temperature range observed was $30.2 - 32.8$ °C, range of minimum temperature observed was $20.8 - 22.8$ °C, mean relative humidity observed in morning and afternoon were 84.3 % and $73.3$ % respectively. The average wind speed range was $0.3 - 0.4$ km/hr.	There may be light to moderate rain upto Wednesday. Sky may be partly cloudy to mainly cloudy with maximum temp. of $30.0 - 32.0$ °C & minimum temp. $20.0 - 22.0$ °C. Relative humidity may reach a maximum of 100 % (maximum RH) & 88 % (minimum RH). The average wind speed may be 0-4 km/hr during next five days.

* Seedling of late variety	RC Maninhou 7	is available at ICAR.	-RC Maninur Centre	Lamnhelnat
Securing of the variety	AC muniphou /	is available at ICAN	-no manipar centre,	Сатрпстри

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
-	tions/ weeding, appl	ication of fertilizer a	nd spray of insecticides/ pesticides may be done before rains.
Field Crops			
Kharif Rice			- Maintain water level of 5-8cm.
	Tillering to		- Weeding may be done before top dressing.
	Panicle initiation		- Apply 33 kg Urea/ha at panicle initiation stage after complete removal of water. Irrigate field after 48 hrs of top dressing and maintain water level at 5-8 cm. If there are insect pest infestations avoid fertilizer application.
		Gall midge	- If gall midge infestation is observed then drain out water completely and apply the following : At early stage of gall midge infestation, spray Fipronil @ 2g/ 15 lit water or Thiomethoxam @ 5g/15 lit of water (i.e., 100g of Thiomethoxam per ha). If it is severe then use Forate @ 4kg per sangam.
		Aphid	Spray Fipronil @ 2g/pump or Imidachloprid 17.8 SL @ 7 ml/ 15 litres.
		Leaf folder, plant	Spray Coragen @ 3ml/15 lit of water or Lambdacyhothrin @ 15ml/ 15
		hopper	litre of water (at least three pumps per sangam).
Soybean	Flowering to	- Rust	- Spray Mancozeb 75% WP @ 1.25 to 2 kg/ ha at 7 to 10 days interval.
	fruiting and pod	- Hairy caterpillar	- Spray Chloropyriphos 20 EC @ 2.5 ml/ lit of water.
	formation	5 1	- Weeding may be done to avoid hairy caterpillar.
Groundnut	Pod formation		- Hand weeding should be done to prevent hairy caterpillar and other insect pest.
		Tikka disease	- Spray Carbendazim @ 0.5g / lit of water.
Blackgram	Vegetative	Hairy caterpillar	Spray Chloropyriphos 20 EC @ 2.5 ml/ lit of water.
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	<u></u>	1	
Ginger/ Turmeric	Rhizome initiation		- Apply Phosphate solubilizing bacteria @ 3-5kg/ acre (1.6 sangam) with compost in soil as bio-fertilizer.
			- Avoid water logging in and around the crop field.
Turmeric	Rhizome	Taphrina Leaf	- For Taphrina Leaf Blotch and other leaf spot diseases apply
	initiation	Blotch and other leaf spot diseases	Trichoderma harzianum @ 5-10gm/ litre water as foliar spray and in soil drenching.



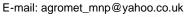
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Onion/ Tom	nato	Nursery		- Raise nurseries of onion & tomato under polyhouses.	
Cabbage/		Land		- Prepare main field for transplanting raised cole crops nurseries.	
Cauliflower	·/	preparation for		- Apply 5 tones (10cart loads) of FYM, 50 kg DAP, 25 Kg MOP as basa	
Broccoli		transplanting		dose.	
Citrus (Lim lemon/ oran		Nursery	Citrus Psylla	- Spray Imidachloprid 70% W.G. (Admire) @0.5g/ litre of water of Nuvan @ 0.5ml/litre of water.	
	0 /		Powdery Mildew	- Spray Mirador (Azoxystrobin023%) @ 1ml/litre of water or Bayletor @ 7g/15 litre water.	
French Bean,     Land       Broad bean & Pea     preparation			Land preparation for sowing of french bean, broad bean and pea may be done. Recommended varieties for French bean are – Pant Anupam, Anupam (to be planted at a spacing of 30cm x 45cm) and Tangkhul Hawai (local) (to be planted at a spacing of 30cm x 60cm with 2-3 seeds per hill). For broad bean, plant local variety at a spacing of 30cm x 45cm. And for pea, Arkel or Azad may be planted at a spacing of 10 cm x 30cm.		
Animal Sci Name of the an		Growth stage	Disease/ infestation	Agro-meteorological advisories	
				logging around the sheds as it may help in mosquito breeding. nd aroung the birds/ animals sheds.	
Poultry		All susceptible age	Ranikhet disease	Vaccinate against Ranikhet disease.	
I outri y		groups (as and when required)		Give Amprolium powder @ 2 g/ lit of drinking water for 7days along with glucose.	
			Deworming	Give Piperazine liquid @ 40 for 100 adult birds ( $30ml$ on $1^{st}$ day and $10ml$ on $2^{nd}$ day).	
			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.	
age requ Pig Abo		Above 3 months of age (as and when required) Above 3 months of age (as and when	Deworming Coccidial infection (Diarrhea)	Give Albendazole liquid. Ofloxacine tab twice daily for 5 days.	
		required)	Deworming	- Deworming against Helminth parasites using Piperazine citrate @ 30	
			Ticks	ml per adult animal once. Add Putor liquid $@ 2 ml/lit of water and use the solution twice a weak$	
			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 / Buffa	alo/	Above 3 months of	Skin infection	Apply Himax ointment on the affected portion two times daily.	
Mithun		age (as and when required)	Deworming	Give Albendazole liquid.	
Fishery:				,	
Type of Farming	Stage	Management	Agro-metrological advisories		
Carp/	Grow	-	- Ponds should be free from unwanted vegetation and insects and water depth should be		
Catfish	out/		maintained at 1.0-1.5m.		
culture	nurse	ries	<ul> <li>Feeds should be provided 2-3 times a day @ 5-10% body weight per day.</li> <li>Well balanced feed fortified with vitamins and minerals should be provided.</li> </ul>		
				4litre/ ha or lime @ 200kg/ ha.	
				ngs/ha can be stocked. Sampling of fish should be done by regular netting.	
Paddy Water management cum fish culture		<ul> <li>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.</li> </ul>			

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





### "Integrated Agromet Advisory Services"

## MANIPUR BULLETIN 2<sup>nd</sup> September, 2014

#### Ukhrul

Significant past weather for the preceding bi-weekly of	Weather forecast for next five days of Ukhrul
Imphal - West (2 <sup>nd</sup> to 4 <sup>th</sup> September, 2014)	(6 <sup>th</sup> to 10 <sup>th</sup> September, 2014)
During past three days sky was partly cloudy to mainly cloudy but mainly clear during morning hours of $29^{\text{th}}$ August. <b>15.9</b> <b>mm</b> rainfall was recorded during past three days. Maximum temperature range observed was $30.2 - 32.8$ °C, range of minimum temperature observed was $20.8 - 22.8$ °C, mean relative humidity observed in morning and afternoon were 84.3 % and $73.3$ % respectively. The average wind speed range was $0.3 - 0.4$ km/hr.	There may be light to moderate rain upto Wednesday. Sky may be partly cloudy to mainly cloudy with maximum temp. of $28.0 - 30.0$ °C & minimum temp. $17.0 - 20.0$ °C. Relative humidity may reach a maximum of 99 % (maximum RH) & 76 % (minimum RH). The average wind speed may be 2- 3 km/hr during next five days.

* Seedling of late variety	RC Maninhou 7	is available at ICAR.	-RC Maninur Centre	Lamnhelnat
Securing of the variety	KC Muniphou /	is available at ICAN	-no manipar centre,	Сатрпстри

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
-	tions/ weeding, appl	ication of fertilizer a	nd spray of insecticides/ pesticides may be done before rains.
Field Crops			
Kharif Rice			- Maintain water level of 5-8cm.
	Tillering to		- Weeding may be done before top dressing.
	Panicle initiation		- Apply 33 kg Urea/ha at panicle initiation stage after complete removal of water. Irrigate field after 48 hrs of top dressing and maintain water level at 5-8 cm. If there are insect pest infestations avoid fertilizer application.
		Gall midge	<ul> <li>If gall midge infestation is observed then drain out water completely and apply the following :</li> <li>At early stage of gall midge infestation, spray Fipronil @ 2g/ 15 lit water or Thiomethoxam @ 5g/15 lit of water (i.e., 100g of Thiomethoxam per ha). If it is severe then use Forate @ 4kg per sangam.</li> </ul>
		Aphid	Spray Fipronil @ 2g/pump or Imidachloprid 17.8 SL @ 7 ml/ 15 litres.
		Leaf folder, plant hopper	Spray Coragen @ 3ml/15 lit of water or Lambdacyhothrin @ 15ml/ 15 litre of water (at least three pumps per sangam).
Sauhaan	Flowering to	- Rust	- Spray Mancozeb 75% WP @ 1.25 to 2 kg/ ha at 7 to 10 days interval.
Soybean	fruiting and pod	- Hairy caterpillar	- Spray Mancozed 75% wr @ 1.25 to 2 kg/ ha at 7 to 10 days interval. - Spray Chloropyriphos 20 EC @ 2.5 ml/ lit of water.
	formation	- many caterpina	- Weeding may be done to avoid hairy caterpillar.
Groundnut	Pod formation		<ul> <li>Hand weeding should be done to prevent hairy caterpillar and other insect pest.</li> </ul>
		Tikka disease	- Spray Carbendazim @ 0.5g / lit of water.
Blackgram	Vegetative	Hairy caterpillar	Spray Chloropyriphos 20 EC @ 2.5 ml/ lit of water.
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			, • • •
Ginger/ Turmeric	Rhizome initiation		- Apply Phosphate solubilizing bacteria @ 3-5kg/ acre (1.6 sangam) with compost in soil as bio-fertilizer.
			- Avoid water logging in and around the crop field.
Turmeric	Rhizome	Taphrina Leaf	- For Taphrina Leaf Blotch and other leaf spot diseases apply
	initiation	Blotch and other leaf spot diseases	Trichoderma harzianum @ 5-10gm/ litre water as foliar spray and in soil drenching.



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



Onion/ Ton	nato	Nursery		- Raise nurseries of onion & tomato under polyhouses.	
Cabbage/		Land		- Prepare main field for transplanting raised cole crops nurseries.	
Cauliflower	•/	preparation for		- Apply 5 tones (10cart loads) of FYM, 50 kg DAP, 25 Kg MOP as basal	
Broccoli		transplanting		dose.	
Citrus (Lim lemon/ oran		Nursery	Citrus Psylla	- Spray Imidachloprid 70% W.G. (Admire) @0.5g/ litre of water or Nuvan @ 0.5ml/litre of water.	
	0 /		Powdery Mildew	- Spray Mirador (Azoxystrobin023%) @ 1ml/litre of water or Bayleton @ 7g/15 litre water.	
French Bean, Broad bean & PeaLand preparation				Land preparation for sowing of french bean, broad bean and pea may be done. Recommended varieties for French bean are – Pant Anupam, Anupam (to be planted at a spacing of 30cm x 45cm) and Tangkhul Hawai (local) (to be planted at a spacing of 30cm x 60cm with 2-3 seeds per hill). For broad bean, plant local variety at a spacing of 30cm x 45cm. And for pea, Arkel or Azad may be planted at a spacing of 10 cm x 30cm.	
Animal Sci Name of the ar		Growth stage	Disease/ infestation	Agro-meteorological advisories	
				logging around the sheds as it may help in mosquito breeding. nd aroung the birds/ animals sheds.	
Poultry	asures t	All susceptible age	Ranikhet disease	Vaccinate against Ranikhet disease.	
i outry		groups (as and when required)		Give Amprolium powder @ 2 g/ lit of drinking water for 7days along with glucose.	
			Deworming	Give Piperazine liquid @ 40 for 100 adult birds (30ml on 1 <sup>st</sup> day and 10ml on 2 <sup>nd</sup> day).	
			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)		Deworming	Give Albendazole liquid.		
Pig		Above 3 months of age (as and when	Coccidial infection (Diarrhea)	Ofloxacine tab twice daily for 5 days.	
		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 / Buffa	alo/	Above 3 months of	Skin infection	Apply Himax ointment on the affected portion two times daily.	
Mithun		age (as and when required)	Deworming	Give Albendazole liquid.	
Fishery:				,	
Type of	Stage	Management	Agro-metrological advisor	ies	
Farming Carn/	Grow		- Ponde should be free	from unwanted vegetation and insects and water depth should be	
Carp/ Catfish		-	- Ponds should be free from unwanted vegetation and insects and water depth should be		
			maintained at 1.0-1.5m. - Feeds should be provided 2-3 times a day @ 5-10% body weight per day.		
culture nurser		105			
			<ul> <li>Well balanced feed fortified with vitamins and minerals should be provided.</li> <li>Apply Green AQ @ 4litre/ ha or lime @ 200kg/ ha.</li> </ul>		
D. 11	XXZ /		- 8000-10,000 fingerlings/ha can be stocked. Sampling of fish should be done by t		
Paddy cum fish culture	um fish c			ter depth of the trenches in paddy field. Provide rice bran and mustard oil entary feed. Avoid insecticide/pesticide application.	

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### "Integrated Agromet Advisory Services"

## MANIPUR BULLETIN 2<sup>nd</sup> September, 2014

#### **Bishnupur**

Significant past weather for the preceding bi-weekly of	Weather forecast for next five days of Bishnupur
Imphal - West (2 <sup>nd</sup> to 4 <sup>th</sup> September, 2014)	(6 <sup>th</sup> to 10 <sup>th</sup> September, 2014)
During past three days sky was partly cloudy to mainly cloudy but mainly clear during morning hours of $29^{\text{th}}$ August. <b>15.9</b> <b>mm</b> rainfall was recorded during past three days. Maximum temperature range observed was $30.2 - 32.8$ °C, range of minimum temperature observed was $20.8 - 22.8$ °C, mean relative humidity observed in morning and afternoon were 84.3 % and $73.3$ % respectively. The average wind speed range was $0.3 - 0.4$ km/hr.	There may be light to moderate rain upto Wednesday. Sky may be partly cloudy to mainly cloudy with maximum temp. of $31.0 - 33.0$ °C & minimum temp. $21.0 - 23.0$ °C. Relative humidity may reach a maximum of 100 % (maximum RH) & 84 % (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
Interculture operat	tions/ weeding, appl	ication of fertilizer a	nd spray of insecticides/ pesticides may be done before rains.
Field Crops			
Kharif Rice	Tillering to Panicle initiation		<ul> <li>Maintain water level of 5-8cm.</li> <li>Weeding may be done before top dressing.</li> <li>Apply 33 kg Urea/ha at panicle initiation stage after complete removal of water. Irrigate field after 48 hrs of top dressing and maintain water level at 5-8 cm. If there are insect pest infestations avoid fertilizer application.</li> </ul>
		Gall midge	<ul> <li>If gall midge infestation is observed then drain out water completely and apply the following :</li> <li>At early stage of gall midge infestation, spray Fipronil @ 2g/ 15 lit water or Thiomethoxam @ 5g/15 lit of water (i.e., 100g of Thiomethoxam per ha). If it is severe then use Forate @ 4kg per sangam.</li> </ul>
		Aphid	Spray Fipronil @ 2g/pump or Imidachloprid 17.8 SL @ 7 ml/ 15 litres.
		Leaf folder, plant hopper	Spray Coragen @ 3ml/15 lit of water or Lambdacyhothrin @ 15ml/ 15 litre of water (at least three pumps per sangam).
Soybean	Flowering to fruiting and pod formation	- Rust - Hairy caterpillar	<ul> <li>Spray Mancozeb 75% WP @ 1.25 to 2 kg/ ha at 7 to 10 days interval.</li> <li>Spray Chloropyriphos 20 EC @ 2.5 ml/ lit of water.</li> <li>Weeding may be done to avoid hairy caterpillar.</li> </ul>
Groundnut	Pod formation		- Hand weeding should be done to prevent hairy caterpillar and other insect pest.
		Tikka disease	- Spray Carbendazim @ 0.5g / lit of water.
Blackgram	Vegetative	Hairy caterpillar	Spray Chloropyriphos 20 EC @ 2.5 ml/ lit of water.
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	_,	1	
Ginger/ Turmeric	Rhizome initiation		<ul> <li>Apply Phosphate solubilizing bacteria @ 3-5kg/ acre (1.6 sangam) with compost in soil as bio-fertilizer.</li> <li>Avoid water logging in and around the crop field.</li> </ul>
Turmeric	Rhizome initiation	Taphrina Leaf Blotch and other leaf spot diseases	<ul> <li>For Taphrina Leaf Blotch and other leaf spot diseases apply Trichoderma harzianum @ 5-10gm/ litre water as foliar spray and in soil drenching.</li> </ul>



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Onion/ Ton	nato	Nursery		- Raise nurseries of onion & tomato under polyhouses.	
Cabbage/ Cauliflower Broccoli	-/	Land preparation for transplanting		<ul> <li>Prepare main field for transplanting raised cole crops nurseries.</li> <li>Apply 5 tones (10cart loads) of FYM, 50 kg DAP, 25 Kg MOP as basal dose.</li> </ul>	
Citrus (Lim lemon/ oran		Nursery	Citrus Psylla	- Spray Imidachloprid 70% W.G. (Admire) @0.5g/ litre of water or Nuvan @ 0.5ml/litre of water.	
	-8-/		Powdery Mildew	- Spray Mirador (Azoxystrobin023%) @ 1ml/litre of water or Bayleton @ 7g/15 litre water.	
French Bean, Broad bean & PeaLand preparation				Land preparation for sowing of french bean, broad bean and pea may be done. Recommended varieties for French bean are – Pant Anupam, Anupam (to be planted at a spacing of 30cm x 45cm) and Tangkhul Hawai (local) (to be planted at a spacing of 30cm x 60cm with 2-3 seeds per hill). For broad bean, plant local variety at a spacing of 30cm x 45cm. And for pea, Arkel or Azad may be planted at a spacing of 10 cm x 30cm.	
Animal Sci Name of the ar		Growth stage	Disease/ infestation	Agro-meteorological advisories	
- Provide clea	an drink			logging around the sheds as it may help in mosquito breeding.	
- Take up me		o reduce flies and mo	osquitoes population in a	nd aroung the birds/ animals sheds.	
Poultry		All susceptible age	Ranikhet disease	Vaccinate against Ranikhet disease.	
		groups (as and when required)		Give Amprolium powder @ 2 g/ lit of drinking water for 7days along with glucose.	
			Deworming	Give Piperazine liquid @ 40 for 100 adult birds (30ml on $1^{st}$ day and 10ml on $2^{nd}$ day).	
			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)		Deworming	Give Albendazole liquid.		
Pig		Above 3 months of age (as and when	Coccidial infection (Diarrhea)	Ofloxacine tab twice daily for 5 days.	
		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 / Buffa	alo/	Above 3 months of	Skin infection	Apply Himax ointment on the affected portion two times daily.	
Mithun		age (as and when required)	Deworming	Give Albendazole liquid.	
Fishery:					
Type of Farming	Stage	Management	Agro-metrological advisories		
Carp/	Grow	-	- Ponds should be free from unwanted vegetation and insects and water depth should be		
Catfish		out/ maintained at 1.0-1.5m.			
culture nurser		105	<ul> <li>Feeds should be provided 2-3 times a day @ 5-10% body weight per day.</li> <li>Well balanced feed fortified with vitamins and minerals should be provided.</li> <li>Apply Green AQ @ 4litre/ ha or lime @ 200kg/ ha.</li> </ul>		
			11.7	ngs/ha can be stocked. Sampling of fish should be done by regular netting.	
Paddy cum fish culture	Water	management			

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



## "Integrated Agromet Advisory Services"

## MANIPUR BULLETIN 2<sup>nd</sup> September, 2014

#### Chandel

Significant past weather for the preceding bi-weekly of	Weather forecast for next five days of Chandel
Imphal - West (2 <sup>nd</sup> to 4 <sup>th</sup> September, 2014)	(6 <sup>th</sup> to 10 <sup>th</sup> September, 2014)
During past three days sky was partly cloudy to mainly cloudy but mainly clear during morning hours of $29^{\text{th}}$ August. <b>15.9</b> <b>mm</b> rainfall was recorded during past three days. Maximum temperature range observed was $30.2 - 32.8$ °C, range of minimum temperature observed was $20.8 - 22.8$ °C, mean relative humidity observed in morning and afternoon were 84.3 % and $73.3$ % respectively. The average wind speed range was $0.3 - 0.4$ km/hr.	There may be light to moderate rain upto Wednesday. Sky may be partly cloudy to mainly cloudy with maximum temp. of $32.0 - 34.0$ °C & minimum temp. $22.0 - 23.0$ °C. Relative humidity may reach a maximum of 99 % (maximum RH) & 81 % (minimum RH). The average wind speed may be 2-4 km/hr during next five days.

* Seedling of late variety	RC Maninhou 7	is available at ICAR.	-RC Maninur Centre	Lamnhelnat
Securing of the variety	KC Muniphou /	is available at ICAN	-no manipar centre,	Сатрпстри

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
Interculture operat	tions/ weeding, appl	ication of fertilizer a	nd spray of insecticides/ pesticides may be done before rains.
Field Crops			
Kharif Rice	Tillering to Panicle initiation		<ul> <li>Maintain water level of 5-8cm.</li> <li>Weeding may be done before top dressing.</li> <li>Apply 33 kg Urea/ha at panicle initiation stage after complete removal of water. Irrigate field after 48 hrs of top dressing and maintain water level at 5-8 cm. If there are insect pest infestations avoid fertilizer application.</li> </ul>
		Gall midge	<ul> <li>If gall midge infestation is observed then drain out water completely and apply the following :</li> <li>At early stage of gall midge infestation, spray Fipronil @ 2g/ 15 lit water or Thiomethoxam @ 5g/15 lit of water (i.e., 100g of Thiomethoxam per ha). If it is severe then use Forate @ 4kg per sangam.</li> </ul>
		Aphid	Spray Fipronil @ 2g/pump or Imidachloprid 17.8 SL @ 7 ml/ 15 litres.
		Leaf folder, plant hopper	Spray Coragen @ 3ml/15 lit of water or Lambdacyhothrin @ 15ml/ 15 litre of water (at least three pumps per sangam).
Soybean	Flowering to fruiting and pod formation	- Rust - Hairy caterpillar	<ul> <li>Spray Mancozeb 75% WP @ 1.25 to 2 kg/ ha at 7 to 10 days interval.</li> <li>Spray Chloropyriphos 20 EC @ 2.5 ml/ lit of water.</li> <li>Weeding may be done to avoid hairy caterpillar.</li> </ul>
Groundnut	Pod formation		- Hand weeding should be done to prevent hairy caterpillar and other insect pest.
		Tikka disease	- Spray Carbendazim @ 0.5g / lit of water.
Blackgram Storage	Vegetative	Hairy caterpillar	<ul> <li>Spray Chloropyriphos 20 EC @ 2.5 ml/ lit of water.</li> <li>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.</li> </ul>
Horticulture Crops	]	1	
Ginger/ Turmeric	Rhizome initiation		<ul> <li>Apply Phosphate solubilizing bacteria @ 3-5kg/ acre (1.6 sangam) with compost in soil as bio-fertilizer.</li> <li>Avoid water logging in and around the crop field.</li> </ul>
Turmeric	Rhizome initiation	Taphrina Leaf Blotch and other leaf spot diseases	<ul> <li>For Taphrina Leaf Blotch and other leaf spot diseases apply Trichoderma harzianum @ 5-10gm/ litre water as foliar spray and in soil drenching.</li> </ul>



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



Onion/ Ton	nato	Nursery		- Raise nurseries of onion & tomato under polyhouses.	
Cabbage/		Land		- Prepare main field for transplanting raised cole crops nurseries.	
Cauliflower	•/	preparation for		- Apply 5 tones (10cart loads) of FYM, 50 kg DAP, 25 Kg MOP as basal	
Broccoli		transplanting		dose.	
Citrus (Lim lemon/ oran		Nursery	Citrus Psylla	- Spray Imidachloprid 70% W.G. (Admire) @0.5g/ litre of water or Nuvan @ 0.5ml/litre of water.	
	0 /		Powdery Mildew	- Spray Mirador (Azoxystrobin023%) @ 1ml/litre of water or Bayleton @ 7g/15 litre water.	
French Bean, Broad bean & PeaLand preparation				Land preparation for sowing of french bean, broad bean and pea may be done. Recommended varieties for French bean are – Pant Anupam, Anupam (to be planted at a spacing of 30cm x 45cm) and Tangkhul Hawai (local) (to be planted at a spacing of 30cm x 60cm with 2-3 seeds per hill). For broad bean, plant local variety at a spacing of 30cm x 45cm. And for pea, Arkel or Azad may be planted at a spacing of 10 cm x 30cm.	
Animal Sci Name of the ar		Growth stage	Disease/ infestation	Agro-meteorological advisories	
				logging around the sheds as it may help in mosquito breeding. nd aroung the birds/ animals sheds.	
Poultry	asures t	All susceptible age	Ranikhet disease	Vaccinate against Ranikhet disease.	
i outry		groups (as and when required)		Give Amprolium powder @ 2 g/ lit of drinking water for 7days along with glucose.	
			Deworming	Give Piperazine liquid @ 40 for 100 adult birds (30ml on 1 <sup>st</sup> day and 10ml on 2 <sup>nd</sup> day).	
			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)		Deworming	Give Albendazole liquid.		
Pig		Above 3 months of age (as and when	Coccidial infection (Diarrhea)	Ofloxacine tab twice daily for 5 days.	
		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 / Buffa	alo/	Above 3 months of	Skin infection	Apply Himax ointment on the affected portion two times daily.	
Mithun		age (as and when required)	Deworming	Give Albendazole liquid.	
Fishery:				,	
Type of	Stage	Management	Agro-metrological advisor	ies	
Farming Carn/	Grow		- Ponde should be free	from unwanted vegetation and insects and water depth should be	
Carp/ Catfish		-	- Ponds should be free from unwanted vegetation and insects and water depth should be		
			maintained at 1.0-1.5m. - Feeds should be provided 2-3 times a day @ 5-10% body weight per day.		
culture nurser		105			
			<ul> <li>Well balanced feed fortified with vitamins and minerals should be provided.</li> <li>Apply Green AQ @ 4litre/ ha or lime @ 200kg/ ha.</li> </ul>		
D. 11	XXZ /		- 8000-10,000 fingerlings/ha can be stocked. Sampling of fish should be done by		
Paddy cum fish culture	um fish c			ter depth of the trenches in paddy field. Provide rice bran and mustard oil entary feed. Avoid insecticide/pesticide application.	