



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



"Integrated Agromet Advisory Services"

MANIPUR BULLETIN 31st August, 2012

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 1st to 5th September, 2012 as given below:

Significant past weather for the preceding bi-weekly of Imphal- West (28th to 30th August, 2012)

During the past three days the sky was partly cloudy to cloudy. 43.9 mm rainfall was recorded during past three days. Maximum temperature range observed was 29.2-32.8 °C, range of minimum temperature observed was 21.5-22.5 °C, mean relative humidity observed in morning and afternoon were 85.5 % and 73.3 % respectively. The average wind speed range was 2.6-3.6 km/hr.

Weather forecast for next five days of Bishnupur (1st to 5th September, 2012)

During next five days, there is likely to have light rainfall. The sky is likely to remain mainly cloudy. The maximum temp. is likely to be 27.0 - 28.0 $^{\circ}\text{C}$. The minimum temp. is likely to be 20.0 - 21.0 $^{\circ}\text{C}$. The maximum RH is likely to attain a max value of 100 %. Minimum RH is likely to reach a max of 97 %. The average wind speed during next five days may reach upto max. value of 4 km/hr.

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
Field Crops			
Rice	Vegetative stage of short duration varieties of rice		 Maintain 10-15 cm of water level. Provide good drainage system to maintain the required amount of water in the field.
	Tillering stage of normal crop		 Maintain 8-10 cm of water level. Ensure that the required amount of water is maintained in the field. Repairing of bands should also be done to prevent leakage of water from the field. Top dress by applying 33kg Urea/ha at 25–30 days after transplanting.
Kharif maize	Cob maturity		- Mature cob must be harvested.
Soybean/ Groundnut	Vegetative	- Hairy caterpillar - Tikka disease	 - If incidence of hairy caterpillar is observed, then spray Quinalphos 25 EC or Chloropyriphos 20 EC @ 2 ml/ lit of water. - Carbendazim @ 0.5g / lit of water may be sprayed to control Tikka disease.
Blackgram	Sowing		Blackgram may be sown as alley crop at maturity stage of rice crop and in the upland fields where rice was not successful.
Storage			 To prevent the infestation of stored grains, attack of rodents and mould growth proper care must be taken. Provide proper ventilation or sun dry the bags/ grains on sunny days. Seeds of crops like maize, rapeseed, etc. must be stored in RC-seed bins after proper drying. Check for germination of seeds. Clean and dry the seeds.
Horticulture C	rops	•	
Brinjal	Fruiting to harvesting	Fruit and shoot borer	- Avoid the use of chemical pesticides. Instead, use sex hormone lure of <i>Lencinodes orbonolis</i> as it is in harvesting stage.
Turmeric	Top dressing		Follow inter-culture operation and earthing up.Apply 40 kg DAP, 20 kg MOP in a hectare area.



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Passion fruit			- Spray Benlate @ 0.5g/lit of water or Cabendazim12% + Mancozeb 63%WP @ 1 mg/ lit of water.
		Termite	- For termite, soil application of Chloropyriphos 10%G @ 25kg/ha near the base of the vine is recommended.
French bean	Sowing		- Sowing may also be done in raised bed in low lying area. Sow both
& Broad bean	8		dwarf and pole type.
			- If already sown, provide mulching material or give minimum
			watering at least once or twice in a week as required.
Cowpea	Fruiting	Pod borer	- Use sex pheromone lure of <i>Helicoverpa armigera</i> as it is in bearing
			stage
Tomato	Harvesting of		Harvest the green mature fruits before ripening, i.e., before the fruits
	early crop		turn red in colour to extend its keeping quality and to avoid market glut
			or follow added programmes.
Cauliflower/	Nursery to		- Soil treatment with Captan 50WP or with formaldehyde is very
Cabbage/	transplanting and		essential. Seed treatment is also good as prophylactic measure.
Broccoli	early vegetative		- Select slightly colder area for sowing area.
			- Spray Malathion or Monocrotophos against mealy bug and aphid as
			prophylactic measure in those area where incidence of these insect pest
			had been reported in past.
			- Transplant the saplings into the main field if the nursery is ready.
			- Light irrigation may be provided to the crops that has been already
			transplanted in foothills and slightly upper area.
Animal Science		T =	
Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
	All susceptible	Endoparasite	- Deworm with Piperazine hexahyderate @ 50ml /100 birds in drinking
Poultry	age groups		water once every month.
		Coccidiosis	- Administer Coximar @ 3g/5 lit of water as preventive measure
			against Coccidiosis for 4 days.
		Ranikhet	- Vaccinate with strain live vaccine @ one drop on eyes or nostril.
			at 7th day.
			- Give R2B vaccine at the age of 45-60 days @0.5 ml (intra-
			muscularly).
			- If the litter material has become moist then apply lime powder @ 1
			kg/ 100ft ² area.
			- Spray disinfectant B-904 @ 4 ml/lit of water around the farm
			premises.
Cattle /	All susceptible	Fascioliosis	- Deworm using Oxyclonazide @ 10-15 mg/ kg body weght.
Buffalo	age groups	Skin infection	- Use Butox @ 2 ml/lit of water while brushing the animal.
			- For new born calf, administer tetracycline (tab. Or powder) @ 5mg/
			kg body weight consecutively for 4 days.
		<u> </u>	- Vaccinate the animals above 3 months of age against FMD, HS & BQ
Goat/ Sheep	All susceptible	Endoparasite	- Deworm against Fascioliasis using Oxyclonazide @ 15 mg/ kg body
	age groups		weight.
			- Give Tetramizole hydrochloride @ 15mg/kg body weight (single
	i e	1	dose).
		Haemorrhagic Septicemia	- Vaccinate against H.S. @ 2 ml sub-cutaneously.



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Pig	Above 3 months of age	Endoparasitic Swine Fever	 De-worm using Albendazole @ 1 ml/3 kg body weight orally once only. Vaccinate against Swine Fever after 3 months of age.
	All susceptible age groups	Coccidiosis	 Advocate Metaprim @ 2g/ 10 kg body weight for 5-7 days. Use Butox @ 2 ml/lit of water while brushing the animal.
Fisheries			
* Ponds should	be free from unwant	ted vegetation and ins	ects
Type of Farming	Stage	Field	Agro-metrological advisories
Carp culture	nurseries	Pond and water	 Water depth should be maintained at 1.0-1.5m. pH of pond water should be maintained at 7.0-7.5 if lower than the above agri-lime should be applied @250kg/ha at valley and 300kg at hilly areas.
		Fish	1.0-10.0 million spawn can be stock in 1 ha pond
Carp culture	Grow -out	Pond and water	 Water depth should be maintained at 1.0-1.5m. Regular manuring at interval of 30 days should be done with a slurry of RCD @1500kg/ha. Agri-lime may be applied @250kg/ha at valley and 300kg at hilly areas. Greenish colouration of water is desirable if any change in colour, odour of water half of the water should be drained out and change with fresh water.
		Fish	 8000-10,000 fingerlings can be stocked in one ha in valley areas and 12,000-15,000 fingerlings can be stocked in hilly area Sampling of fish for growth, diseases (if any) should be done by regular netting.
Paddy cum fish culture	water		 Water depth of the trenches in paddy field should be maintained at 1.0m Application of insecticide/pesticide should be prohibited in paddy cum fish culture.



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MANIPUR BULLETIN 31st August, 2012

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 1st to 5th September, 2012 as given below:

Significant past weather for the preceding bi-weekly of Imphal- West (28th to 30th August, 2012)

During the past three days the sky was partly cloudy to cloudy. 43.9 mm rainfall was recorded during past three days. Maximum temperature range observed was 29.2-32.8 °C, range of minimum temperature observed was 21.5-22.5 °C, mean relative humidity observed in morning and afternoon were 85.5 % and 73.3 % respectively. The average wind speed range was 2.6-3.6 km/hr.

Weather forecast for next five days of Chandel (1st to 5th September, 2012)

During next five days, there is likely to have light rainfall. The sky is likely to remain mainly cloudy. The maximum temp. is likely to be 32.0 - 33.0 $^{\circ}\text{C}$. The minimum temp. is likely to be 24.0 – 25.0 $^{\circ}\text{C}$. The maximum RH is likely to attain a max value of 99 %. Minimum RH is likely to reach a max of 97 %. The average wind speed during next five days may reach upto max. value of 5 km/hr.

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
Field Crops		mestation	
Tiem Crops	Vegetative stage of		- Maintain 10-15 cm of water level.
Rice	short duration		- Provide good drainage system to maintain the required amount of
2000	varieties of rice		water in the field.
	Tillering stage of		- Maintain 8-10 cm of water level.
	normal crop		- Ensure that the required amount of water is maintained in the field.
			Repairing of bands should also be done to prevent leakage of water
			from the field.
			- Top dress by applying 33kg Urea/ha at 25-30 days after
			transplanting.
Kharif maize	Cob maturity		- Mature cob must be harvested.
Soybean/	Vegetative	- Hairy caterpillar	- If incidence of hairy caterpillar is observed, then spray Quinalphos 25
Groundnut			EC or Chloropyriphos 20 EC @ 2 ml/ lit of water.
		- Tikka disease	- Carbendazim @ 0.5g / lit of water may be sprayed to control Tikka
			disease.
Blackgram	Sowing		Blackgram may be sown as alley crop at maturity stage of rice crop and
			in the upland fields where rice was not successful.
Character			- To prevent the infestation of stored grains, attack of rodents and
Storage			mould growth proper care must be taken. Provide proper ventilation or
			sun dry the bags/ grains on sunny days Seeds of crops like maize, rapeseed, etc. must be stored in RC-seed
			bins after proper drying. Check for germination of seeds. Clean and dry
			the seeds.
Horticulture C	rops	1	die seeds.
Brinjal	Fruiting to	Fruit and shoot	- Avoid the use of chemical pesticides. Instead, use sex hormone lure
9	harvesting	borer	of <i>Lencinodes orbonolis</i> as it is in harvesting stage.
Turmeric	Top dressing		- Follow inter-culture operation and earthing up.
	_		- Apply 40 kg DAP, 20 kg MOP in a hectare area.



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Passion fruit			- Spray Benlate @ 0.5g/lit of water or Cabendazim12% + Mancozeb 63%WP @ 1 mg/ lit of water.
		Termite	- For termite, soil application of Chloropyriphos 10%G @ 25kg/ha near the base of the vine is recommended.
French bean	Sowing		- Sowing may also be done in raised bed in low lying area. Sow both
& Broad bean	8		dwarf and pole type.
			- If already sown, provide mulching material or give minimum
			watering at least once or twice in a week as required.
Cowpea	Fruiting	Pod borer	- Use sex pheromone lure of <i>Helicoverpa armigera</i> as it is in bearing
			stage
Tomato	Harvesting of		Harvest the green mature fruits before ripening, i.e., before the fruits
	early crop		turn red in colour to extend its keeping quality and to avoid market glut
			or follow added programmes.
Cauliflower/	Nursery to		- Soil treatment with Captan 50WP or with formaldehyde is very
Cabbage/	transplanting and		essential. Seed treatment is also good as prophylactic measure.
Broccoli	early vegetative		- Select slightly colder area for sowing area.
			- Spray Malathion or Monocrotophos against mealy bug and aphid as
			prophylactic measure in those area where incidence of these insect pest
			had been reported in past.
			- Transplant the saplings into the main field if the nursery is ready.
			- Light irrigation may be provided to the crops that has been already
			transplanted in foothills and slightly upper area.
Animal Science		T =	
Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
	All susceptible	Endoparasite	- Deworm with Piperazine hexahyderate @ 50ml /100 birds in drinking
Poultry	age groups		water once every month.
		Coccidiosis	- Administer Coximar @ 3g/5 lit of water as preventive measure
			against Coccidiosis for 4 days.
		Ranikhet	- Vaccinate with strain live vaccine @ one drop on eyes or nostril.
			at 7th day.
			- Give R2B vaccine at the age of 45-60 days @0.5 ml (intra-
			muscularly).
			- If the litter material has become moist then apply lime powder @ 1
			kg/ 100ft ² area.
			- Spray disinfectant B-904 @ 4 ml/lit of water around the farm
			premises.
Cattle /	All susceptible	Fascioliosis	- Deworm using Oxyclonazide @ 10-15 mg/ kg body weght.
Buffalo	age groups	Skin infection	- Use Butox @ 2 ml/lit of water while brushing the animal.
			- For new born calf, administer tetracycline (tab. Or powder) @ 5mg/
			kg body weight consecutively for 4 days.
		<u> </u>	- Vaccinate the animals above 3 months of age against FMD, HS & BQ
Goat/ Sheep	All susceptible	Endoparasite	- Deworm against Fascioliasis using Oxyclonazide @ 15 mg/ kg body
	age groups		weight.
			- Give Tetramizole hydrochloride @ 15mg/kg body weight (single
	i e	1	dose).
		Haemorrhagic Septicemia	- Vaccinate against H.S. @ 2 ml sub-cutaneously.



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Pig	Above 3 months of age	Endoparasitic Swine Fever	 De-worm using Albendazole @ 1 ml/3 kg body weight orally once only. Vaccinate against Swine Fever after 3 months of age.
	All susceptible age groups	Coccidiosis	 Advocate Metaprim @ 2g/ 10 kg body weight for 5-7 days. Use Butox @ 2 ml/lit of water while brushing the animal.
Fisheries			
* Ponds should	be free from unwant	ted vegetation and ins	ects
Type of Farming	Stage	Field	Agro-metrological advisories
Carp culture	nurseries	Pond and water	 Water depth should be maintained at 1.0-1.5m. pH of pond water should be maintained at 7.0-7.5 if lower than the above agri-lime should be applied @250kg/ha at valley and 300kg at hilly areas.
		Fish	1.0-10.0 million spawn can be stock in 1 ha pond
Carp culture	Grow -out	Pond and water	 Water depth should be maintained at 1.0-1.5m. Regular manuring at interval of 30 days should be done with a slurry of RCD @1500kg/ha. Agri-lime may be applied @250kg/ha at valley and 300kg at hilly areas. Greenish colouration of water is desirable if any change in colour, odour of water half of the water should be drained out and change with fresh water.
		Fish	 8000-10,000 fingerlings can be stocked in one ha in valley areas and 12,000-15,000 fingerlings can be stocked in hilly area Sampling of fish for growth, diseases (if any) should be done by regular netting.
Paddy cum fish culture	water		 Water depth of the trenches in paddy field should be maintained at 1.0m Application of insecticide/pesticide should be prohibited in paddy cum fish culture.





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Churachandpur

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During the past three days the sky was partly cloudy to cloudy. 43.9 mm rainfall was recorded during past three days. Maximum temperature range observed was 29.2-32.8 °C, range of minimum temperature observed was 21.5-22.5 °C, mean relative humidity observed in morning and afternoon were 85.5 % and 73.3 % respectively. The average wind speed range was 2.6-3.6 km/hr.

Weather forecast for next five days of Churachandpur (1st to 5th September, 2012)

During next five days, there is likely to have light rainfall. The sky is likely to remain mainly cloudy. The maximum temp. is likely to be $28.0 - 29.0\,^{\circ}$ C. The minimum temp. is likely to be $23.0\,^{\circ}$ C. The RH is likely to remain above 89 % during next five days. The average wind speed during next five days may reach upto max. value of 3 km/hr.

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
Field Crops		mestation	
Tiem Crops	Vegetative stage of		- Maintain 8 -10 cm of water level.
Rice	short duration		- Provide good drainage system to maintain the required amount of
2000	varieties of rice		water in the field.
	Tillering stage of		- Maintain 8-10 cm of water level.
	normal crop		- Ensure that the required amount of water is maintained in the field.
	_		Repairing of bands should also be done to prevent leakage of water
			from the field.
			- Top dress by applying 33kg Urea/ha at 25–30 days after
			transplanting.
Kharif maize	Cob maturity		- Mature cob must be harvested.
Soybean/	Vegetative	- Hairy caterpillar	- If incidence of hairy caterpillar is observed, then spray Quinalphos 25
Groundnut			EC or Chloropyriphos 20 EC @ 2 ml/ lit of water.
		- Tikka disease	- Carbendazim @ 0.5g / lit of water may be sprayed to control Tikka
Dia da ancesa	C		disease.
Blackgram	Sowing		Blackgram may be sown as alley crop at maturity stage of rice crop and in the upland fields where rice was not successful.
			- To prevent the infestation of stored grains, attack of rodents and
Storage			mould growth proper care must be taken. Provide proper ventilation or
Storage			sun dry the bags/ grains on sunny days.
			- Seeds of crops like maize, rapeseed, etc. must be stored in RC-seed
			bins after proper drying. Check for germination of seeds. Clean and dry
			the seeds.
Horticulture C	rops		
Brinjal	Fruiting to	Fruit and shoot	- Avoid the use of chemical pesticides. Instead, use sex hormone lure
-	harvesting	borer	of Lencinodes orbonolis as it is in harvesting stage.
Turmeric	Top dressing		- Follow inter-culture operation and earthing up.
			- Apply 40 kg DAP, 20 kg MOP in a hectare area.



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Passion fruit			- Spray Benlate @ 0.5g/lit of water or Cabendazim12% + Mancozeb 63%WP @ 1 mg/ lit of water.
		Termite	- For termite, soil application of Chloropyriphos 10%G @ 25kg/ha near the base of the vine is recommended.
French bean	Sowing		- Sowing may also be done in raised bed in low lying area. Sow both
& Broad bean	8		dwarf and pole type.
			- If already sown, provide mulching material or give minimum
			watering at least once or twice in a week as required.
Cowpea	Fruiting	Pod borer	- Use sex pheromone lure of <i>Helicoverpa armigera</i> as it is in bearing
			stage
Tomato	Harvesting of		Harvest the green mature fruits before ripening, i.e., before the fruits
	early crop		turn red in colour to extend its keeping quality and to avoid market glut
			or follow added programmes.
Cauliflower/	Nursery to		- Soil treatment with Captan 50WP or with formaldehyde is very
Cabbage/	transplanting and		essential. Seed treatment is also good as prophylactic measure.
Broccoli	early vegetative		- Select slightly colder area for sowing area.
			- Spray Malathion or Monocrotophos against mealy bug and aphid as
			prophylactic measure in those area where incidence of these insect pest
			had been reported in past.
			- Transplant the saplings into the main field if the nursery is ready.
			- Light irrigation may be provided to the crops that has been already
			transplanted in foothills and slightly upper area.
Animal Science		T =	
Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
	All susceptible	Endoparasite	- Deworm with Piperazine hexahyderate @ 50ml /100 birds in drinking
Poultry	age groups		water once every month.
		Coccidiosis	- Administer Coximar @ 3g/5 lit of water as preventive measure
			against Coccidiosis for 4 days.
		Ranikhet	- Vaccinate with strain live vaccine @ one drop on eyes or nostril.
			at 7th day.
			- Give R2B vaccine at the age of 45-60 days @0.5 ml (intra-
			muscularly).
			- If the litter material has become moist then apply lime powder @ 1
			kg/ 100ft ² area.
			- Spray disinfectant B-904 @ 4 ml/lit of water around the farm
			premises.
Cattle /	All susceptible	Fascioliosis	- Deworm using Oxyclonazide @ 10-15 mg/ kg body weght.
Buffalo	age groups	Skin infection	- Use Butox @ 2 ml/lit of water while brushing the animal.
			- For new born calf, administer tetracycline (tab. Or powder) @ 5mg/
			kg body weight consecutively for 4 days.
		<u> </u>	- Vaccinate the animals above 3 months of age against FMD, HS & BQ
Goat/ Sheep	All susceptible	Endoparasite	- Deworm against Fascioliasis using Oxyclonazide @ 15 mg/ kg body
	age groups		weight.
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		Haemorrhagic Septicemia	- Vaccinate against H.S. @ 2 ml sub-cutaneously.



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Pig	Above 3 months of age	Endoparasitic Swine Fever	 De-worm using Albendazole @ 1 ml/3 kg body weight orally once only. Vaccinate against Swine Fever after 3 months of age.
	All susceptible age groups	Coccidiosis	 Advocate Metaprim @ 2g/ 10 kg body weight for 5-7 days. Use Butox @ 2 ml/lit of water while brushing the animal.
Fisheries			
* Ponds should	be free from unwant	ted vegetation and ins	ects
Type of Farming	Stage	Field	Agro-metrological advisories
Carp culture	nurseries	Pond and water	 Water depth should be maintained at 1.0-1.5m. pH of pond water should be maintained at 7.0-7.5 if lower than the above agri-lime should be applied @250kg/ha at valley and 300kg at hilly areas.
		Fish	1.0-10.0 million spawn can be stock in 1 ha pond
Carp culture	Grow -out	Pond and water	 Water depth should be maintained at 1.0-1.5m. Regular manuring at interval of 30 days should be done with a slurry of RCD @1500kg/ha. Agri-lime may be applied @250kg/ha at valley and 300kg at hilly areas. Greenish colouration of water is desirable if any change in colour, odour of water half of the water should be drained out and change with fresh water.
		Fish	 8000-10,000 fingerlings can be stocked in one ha in valley areas and 12,000-15,000 fingerlings can be stocked in hilly area Sampling of fish for growth, diseases (if any) should be done by regular netting.
Paddy cum fish culture	water		 Water depth of the trenches in paddy field should be maintained at 1.0m Application of insecticide/pesticide should be prohibited in paddy cum fish culture.





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MANIPUR BULLETIN 31st August, 2012

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 1st to 5th September, 2012 as given below:

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Weather forecast for next five days of Imphal- East (1st to 5th September, 2012)

During next five days, there is likely to have light rainfall. The sky is likely to remain mainly cloudy. The maximum temp. is likely to be 28.0 - 30.0 °C. The minimum temp. is likely to be 21.0- 22.0 °C. The maximum RH is likely to attain a max value of 98 %. Minimum RH is likely to reach a max of 86 %. The average wind speed during next five days may reach upto max. value of 3 km/hr.

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
Field Crops		I.	
Rice	Vegetative stage of short duration varieties of rice		 Maintain 10-15 cm of water level. Provide good drainage system to maintain the required amount of water in the field.
	Tillering stage of normal crop		 Maintain 8-10 cm of water level. Ensure that the required amount of water is maintained in the field. Repairing of bands should also be done to prevent leakage of water from the field. Top dress by applying 33kg Urea/ha at 25–30 days after transplanting.
Kharif maize	Cob maturity		- Mature cob must be harvested.
Soybean/ Groundnut	Vegetative	- Hairy caterpillar - Tikka disease	 If incidence of hairy caterpillar is observed, then spray Quinalphos 25 EC or Chloropyriphos 20 EC @ 2 ml/ lit of water. Carbendazim @ 0.5g / lit of water may be sprayed to control Tikka disease.
Blackgram	Sowing		Blackgram may be sown as alley crop at maturity stage of rice crop and in the upland fields where rice was not successful.
Storage			 To prevent the infestation of stored grains, attack of rodents and mould growth proper care must be taken. Provide proper ventilation or sun dry the bags/ grains on sunny days. Seeds of crops like maize, rapeseed, etc. must be stored in RC-seed bins after proper drying. Check for germination of seeds. Clean and dry the seeds.
Horticulture C	rops	•	
Brinjal	Fruiting to harvesting	Fruit and shoot borer	- Avoid the use of chemical pesticides. Instead, use sex hormone lure of <i>Lencinodes orbonolis</i> as it is in harvesting stage.
Turmeric	Top dressing		Follow inter-culture operation and earthing up.Apply 40 kg DAP, 20 kg MOP in a hectare area.



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Passion fruit			- Spray Benlate @ 0.5g/lit of water or Cabendazim12% + Mancozeb 63%WP @ 1 mg/ lit of water.
		Termite	- For termite, soil application of Chloropyriphos 10%G @ 25kg/ha near the base of the vine is recommended.
French bean	Sowing		- Sowing may also be done in raised bed in low lying area. Sow both
& Broad bean	8		dwarf and pole type.
			- If already sown, provide mulching material or give minimum
			watering at least once or twice in a week as required.
Cowpea	Fruiting	Pod borer	- Use sex pheromone lure of <i>Helicoverpa armigera</i> as it is in bearing
			stage
Tomato	Harvesting of		Harvest the green mature fruits before ripening, i.e., before the fruits
	early crop		turn red in colour to extend its keeping quality and to avoid market glut
			or follow added programmes.
Cauliflower/	Nursery to		- Soil treatment with Captan 50WP or with formaldehyde is very
Cabbage/	transplanting and		essential. Seed treatment is also good as prophylactic measure.
Broccoli	early vegetative		- Select slightly colder area for sowing area.
			- Spray Malathion or Monocrotophos against mealy bug and aphid as
			prophylactic measure in those area where incidence of these insect pest
			had been reported in past.
			- Transplant the saplings into the main field if the nursery is ready.
			- Light irrigation may be provided to the crops that has been already
			transplanted in foothills and slightly upper area.
Animal Science		T =	
Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
	All susceptible	Endoparasite	- Deworm with Piperazine hexahyderate @ 50ml /100 birds in drinking
Poultry	age groups		water once every month.
		Coccidiosis	- Administer Coximar @ 3g/5 lit of water as preventive measure
			against Coccidiosis for 4 days.
		Ranikhet	- Vaccinate with strain live vaccine @ one drop on eyes or nostril.
			at 7th day.
			- Give R2B vaccine at the age of 45-60 days @0.5 ml (intra-
			muscularly).
			- If the litter material has become moist then apply lime powder @ 1
			kg/ 100ft ² area.
			- Spray disinfectant B-904 @ 4 ml/lit of water around the farm
			premises.
Cattle /	All susceptible	Fascioliosis	- Deworm using Oxyclonazide @ 10-15 mg/ kg body weght.
Buffalo	age groups	Skin infection	- Use Butox @ 2 ml/lit of water while brushing the animal.
			- For new born calf, administer tetracycline (tab. Or powder) @ 5mg/
			kg body weight consecutively for 4 days.
		<u> </u>	- Vaccinate the animals above 3 months of age against FMD, HS & BQ
Goat/ Sheep	All susceptible	Endoparasite	- Deworm against Fascioliasis using Oxyclonazide @ 15 mg/ kg body
	age groups		weight.
			- Give Tetramizole hydrochloride @ 15mg/kg body weight (single
	i e	1	dose).
		Haemorrhagic Septicemia	- Vaccinate against H.S. @ 2 ml sub-cutaneously.



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Pig	Above 3 months of age	Endoparasitic Swine Fever	 De-worm using Albendazole @ 1 ml/3 kg body weight orally once only. Vaccinate against Swine Fever after 3 months of age.
	All susceptible age groups	Coccidiosis	 Advocate Metaprim @ 2g/ 10 kg body weight for 5-7 days. Use Butox @ 2 ml/lit of water while brushing the animal.
Fisheries			
* Ponds should	be free from unwant	ted vegetation and ins	ects
Type of Farming	Stage	Field	Agro-metrological advisories
Carp culture	nurseries	Pond and water	 Water depth should be maintained at 1.0-1.5m. pH of pond water should be maintained at 7.0-7.5 if lower than the above agri-lime should be applied @250kg/ha at valley and 300kg at hilly areas.
		Fish	1.0-10.0 million spawn can be stock in 1 ha pond
Carp culture	Grow -out	Pond and water	 Water depth should be maintained at 1.0-1.5m. Regular manuring at interval of 30 days should be done with a slurry of RCD @1500kg/ha. Agri-lime may be applied @250kg/ha at valley and 300kg at hilly areas. Greenish colouration of water is desirable if any change in colour, odour of water half of the water should be drained out and change with fresh water.
		Fish	 8000-10,000 fingerlings can be stocked in one ha in valley areas and 12,000-15,000 fingerlings can be stocked in hilly area Sampling of fish for growth, diseases (if any) should be done by regular netting.
Paddy cum fish culture	water		 Water depth of the trenches in paddy field should be maintained at 1.0m Application of insecticide/pesticide should be prohibited in paddy cum fish culture.





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"Integrated Agromet Advisory Services"

MANIPUR BULLETIN 31st August, 2012

Imphal-West

IAAS, ICAR-RC Manipur Centre in association with India Meteorological Department, Regional Meteorological Centre, Guwahati and Northern Hemisphere Analysis Centre, New Delhi, Ministry of Earth Science, Govt. of India reports the weather forecasts for the next five days, i.e., from 1st to 5th September, 2012 as given below:

Significant past weather for the preceding bi-weekly of Imphal- West (28th to 30th August, 2012)

During the past three days the sky was partly cloudy to cloudy. 43.9 mm rainfall was recorded during past three days. Maximum temperature range observed was 29.2-32.8 °C, range of minimum temperature observed was 21.5-22.5 °C, mean relative humidity observed in morning and afternoon were 85.5 % and 73.3 % respectively. The average wind speed range was 2.6-3.6 km/hr.

Weather forecast for next five days of Imphal- West (1st to 5th September, 2012)

During next five days, there is likely to have light rainfall. The sky is likely to remain mainly cloudy. The maximum temp. is likely to be 27.0 - 28.0 $^{\circ}\text{C}$. The minimum temp. is likely to be 20.0 $^{\circ}\text{C}$. The maximum RH is likely to attain a max value of 100 %. Minimum RH is likely to reach a max of 96 %. The average wind speed during next five days may reach upto max. value of 4 km/hr.

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
•		mestation	
Field Crops	Txx	1	
	Vegetative stage of		- Maintain 8 - 10 cm of water level.
Rice	short duration		- Provide good drainage system to maintain the required amount of
	varieties of rice		water in the field.
	Tillering stage of		- Maintain 8-10 cm of water level.
	normal crop		- Ensure that the required amount of water is maintained in the field.
			Repairing of bands should also be done to prevent leakage of water
			from the field.
			- Top dress by applying 33kg Urea/ha at 25–30 days after
			transplanting.
Kharif maize	Cob maturity		- Mature cob must be harvested.
Soybean/	Vegetative	- Hairy caterpillar	- If incidence of hairy caterpillar is observed, then spray Quinalphos 25
Groundnut			EC or Chloropyriphos 20 EC @ 2 ml/ lit of water.
		- Tikka disease	- Carbendazim @ 0.5g / lit of water may be sprayed to control Tikka
			disease.
Blackgram	Sowing		Blackgram may be sown as alley crop at maturity stage of rice crop and
			in the upland fields where rice was not successful.
			- To prevent the infestation of stored grains, attack of rodents and
Storage			mould growth proper care must be taken. Provide proper ventilation or
			sun dry the bags/ grains on sunny days.
			- Seeds of crops like maize, rapeseed, etc. must be stored in RC-seed
			bins after proper drying. Check for germination of seeds. Clean and dry
			the seeds.
Horticulture C	rops		
Brinjal	Fruiting to	Fruit and shoot	- Avoid the use of chemical pesticides. Instead, use sex hormone lure
•	harvesting	borer	of Lencinodes orbonolis as it is in harvesting stage.
Turmeric	Top dressing		- Follow inter-culture operation and earthing up.
	-		- Apply 40 kg DAP, 20 kg MOP in a hectare area.



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Passion fruit			- Spray Benlate @ 0.5g/lit of water or Cabendazim12% + Mancozeb 63%WP @ 1 mg/ lit of water.
		Termite	- For termite, soil application of Chloropyriphos 10%G @ 25kg/ha near the base of the vine is recommended.
French bean	Sowing		- Sowing may also be done in raised bed in low lying area. Sow both
& Broad bean	8		dwarf and pole type.
			- If already sown, provide mulching material or give minimum
			watering at least once or twice in a week as required.
Cowpea	Fruiting	Pod borer	- Use sex pheromone lure of <i>Helicoverpa armigera</i> as it is in bearing
			stage
Tomato	Harvesting of		Harvest the green mature fruits before ripening, i.e., before the fruits
	early crop		turn red in colour to extend its keeping quality and to avoid market glut
			or follow added programmes.
Cauliflower/	Nursery to		- Soil treatment with Captan 50WP or with formaldehyde is very
Cabbage/	transplanting and		essential. Seed treatment is also good as prophylactic measure.
Broccoli	early vegetative		- Select slightly colder area for sowing area.
			- Spray Malathion or Monocrotophos against mealy bug and aphid as
			prophylactic measure in those area where incidence of these insect pest
			had been reported in past.
			- Transplant the saplings into the main field if the nursery is ready.
			- Light irrigation may be provided to the crops that has been already
			transplanted in foothills and slightly upper area.
Animal Science		T =	
Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
	All susceptible	Endoparasite	- Deworm with Piperazine hexahyderate @ 50ml /100 birds in drinking
Poultry	age groups		water once every month.
		Coccidiosis	- Administer Coximar @ 3g/5 lit of water as preventive measure
			against Coccidiosis for 4 days.
		Ranikhet	- Vaccinate with strain live vaccine @ one drop on eyes or nostril.
			at 7th day.
			- Give R2B vaccine at the age of 45-60 days @0.5 ml (intra-
			muscularly).
			- If the litter material has become moist then apply lime powder @ 1
			kg/ 100ft ² area.
			- Spray disinfectant B-904 @ 4 ml/lit of water around the farm
			premises.
Cattle /	All susceptible	Fascioliosis	- Deworm using Oxyclonazide @ 10-15 mg/ kg body weght.
Buffalo	age groups	Skin infection	- Use Butox @ 2 ml/lit of water while brushing the animal.
			- For new born calf, administer tetracycline (tab. Or powder) @ 5mg/
			kg body weight consecutively for 4 days.
		<u> </u>	- Vaccinate the animals above 3 months of age against FMD, HS & BQ
Goat/ Sheep	All susceptible	Endoparasite	- Deworm against Fascioliasis using Oxyclonazide @ 15 mg/ kg body
	age groups		weight.
			- Give Tetramizole hydrochloride @ 15mg/kg body weight (single
	i e	1	dose).
		Haemorrhagic Septicemia	- Vaccinate against H.S. @ 2 ml sub-cutaneously.



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



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Pig	Above 3 months of age	Endoparasitic Swine Fever	 De-worm using Albendazole @ 1 ml/3 kg body weight orally once only. Vaccinate against Swine Fever after 3 months of age.
	All susceptible age groups	Coccidiosis	 Advocate Metaprim @ 2g/ 10 kg body weight for 5-7 days. Use Butox @ 2 ml/lit of water while brushing the animal.
Fisheries			
* Ponds should	be free from unwant	ted vegetation and ins	ects
Type of Farming	Stage	Field	Agro-metrological advisories
Carp culture	nurseries	Pond and water	 Water depth should be maintained at 1.0-1.5m. pH of pond water should be maintained at 7.0-7.5 if lower than the above agri-lime should be applied @250kg/ha at valley and 300kg at hilly areas.
		Fish	1.0-10.0 million spawn can be stock in 1 ha pond
Carp culture	Grow -out	Pond and water	 Water depth should be maintained at 1.0-1.5m. Regular manuring at interval of 30 days should be done with a slurry of RCD @1500kg/ha. Agri-lime may be applied @250kg/ha at valley and 300kg at hilly areas. Greenish colouration of water is desirable if any change in colour, odour of water half of the water should be drained out and change with fresh water.
		Fish	 8000-10,000 fingerlings can be stocked in one ha in valley areas and 12,000-15,000 fingerlings can be stocked in hilly area Sampling of fish for growth, diseases (if any) should be done by regular netting.
Paddy cum fish culture	water		 Water depth of the trenches in paddy field should be maintained at 1.0m Application of insecticide/pesticide should be prohibited in paddy cum fish culture.



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"Integrated Agromet Advisory Services"

MANIPUR BULLETIN 31st August, 2012

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 1st to 5th September, 2012 as given below:

Significant past weather for the preceding bi-weekly of Imphal- West (28th to 30th August, 2012)

During the past three days the sky was partly cloudy to cloudy. 43.9 mm rainfall was recorded during past three days. Maximum temperature range observed was 29.2-32.8 °C, range of minimum temperature observed was 21.5-22.5 °C, mean relative humidity observed in morning and afternoon were 85.5 % and 73.3 % respectively. The average wind speed range was 2.6-3.6 km/hr.

Weather forecast for next five days of Senapati (1st to 5th September, 2012)

During next five days, there is likely to have light rainfall. The sky is likely to remain mainly cloudy. The maximum temp. is likely to be 25.0 - 28.0 $^{\rm o}$ C. The minimum temp. is likely to be 19.0 - 21.0 $^{\rm o}$ C. The maximum RH is likely to attain a max value of 99 %. Minimum RH is likely to reach a max of 92 %. The average wind speed during next five days may reach upto max. value of 3 km/hr.

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
Field Crops	1	1	
Rice	Vegetative stage of short duration varieties of rice		 Maintain 8 -10 cm of water level. Provide good drainage system to maintain the required amount of water in the field.
	Tillering stage of normal crop		 Maintain 8-10 cm of water level. Ensure that the required amount of water is maintained in the field. Repairing of bands should also be done to prevent leakage of water from the field. Top dress by applying 33kg Urea/ha at 25–30 days after transplanting.
Kharif maize	Cob maturity		- Mature cob must be harvested.
Soybean	Vegetative	- Hairy caterpillar	- If incidence of hairy caterpillar is observed, then spray Quinalphos 25 EC or Chloropyriphos 20 EC @ 2 ml/ lit of water.
Blackgram	Sowing		Blackgram may be sown as alley crop at maturity stage of rice crop and in the upland fields where rice was not successful.
Storage			 To prevent the infestation of stored grains, attack of rodents and mould growth proper care must be taken. Provide proper ventilation or sun dry the bags/ grains on sunny days. Seeds of crops like maize, rapeseed, etc. must be stored in RC-seed bins after proper drying. Check for germination of seeds. Clean and dry the seeds.
Horticulture C	rops	1	
Brinjal	Fruiting to harvesting	Fruit and shoot borer	- Avoid the use of chemical pesticides. Instead, use sex hormone lure of <i>Lencinodes orbonolis</i> as it is in harvesting stage.
Turmeric	Top dressing		Follow inter-culture operation and earthing up.Apply 40 kg DAP, 20 kg MOP in a hectare area.
Cowpea	Fruiting	Pod borer	- Use sex pheromone lure of <i>Helicoverpa armigera</i> as it is in bearing stage



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Passion fruit			- Spray Benlate @ 0.5g/lit of water or Cabendazim12% + Mancozeb 63%WP @ 1 mg/ lit of water.
		Termite	- For termite, soil application of Chloropyriphos 10%G @ 25kg/ha near the base of the vine is recommended.
French bean	Sowing		- Sowing may also be done in raised bed in low lying area. Sow both
& Broad bean			dwarf and pole type.
			- If already sown, provide mulching material or give minimum
			watering at least once or twice in a week as required.
Cole crop	Nursery to		- Soil treatment with Captan 50WP or with formaldehyde is very
	transplanting and		essential. Seed treatment is also good as prophylactic measure.
	early vegetative		- Select slightly colder area for sowing area.
			- Spray Malathion or Monocrotophos against mealy bug and aphid as
			prophylactic measure in those area where incidence of these insect pest
			had been reported in past.
			- Transplant the saplings into the main field if the nursery is ready.
			- Light irrigation may be provided to the crops that has been already
			transplanted in foothills and slightly upper area.
Animal Science		T (A. A	
Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
	All susceptible	Endoparasite	- Deworm with Piperazine hexahyderate @ 50ml /100 birds in drinking
Poultry	age groups		water once every month.
		Coccidiosis	- Administer Coximar @ 3g/5 lit of water as preventive measure
			against Coccidiosis for 4 days.
		Ranikhet	- Vaccinate with strain live vaccine @ one drop on eyes or nostril.
			at 7th day.
			- Give R2B vaccine at the age of 45-60 days @0.5 ml (intra-
			muscularly).
			- If the litter material has become moist then apply lime powder @ 1
			kg/ 100ft ² area.
			- Spray disinfectant B-904 @ 4 ml/lit of water around the farm
			premises.
Cattle /	All susceptible	Fascioliosis	- Deworm using Oxyclonazide @ 10-15 mg/ kg body weght.
Buffalo	age groups	Skin infection	- Use Butox @ 2 ml/lit of water while brushing the animal.
			- For new born calf, administer tetracycline (tab. Or powder) @ 5mg/
			kg body weight consecutively for 4 days.
			- Vaccinate the animals above 3 months of age against FMD, HS & BQ
Goat/ Sheep	All susceptible	Endoparasite	- Deworm against Fascioliasis using Oxyclonazide @ 15 mg/ kg body
	age groups		weight.
			- Give Tetramizole hydrochloride @ 15mg/kg body weight (single
			dose).
		Haemorrhagic	- Vaccinate against H.S. @ 2 ml sub-cutaneously.
		Septicemia	



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Pig	Above 3 months of age	Endoparasitic Swine Fever	 De-worm using Albendazole @ 1 ml/3 kg body weight orally once only. Vaccinate against Swine Fever after 3 months of age.
	All susceptible age groups	Coccidiosis	 Advocate Metaprim @ 2g/ 10 kg body weight for 5-7 days. Use Butox @ 2 ml/lit of water while brushing the animal.
Fisheries			
* Ponds should	be free from unwant	ted vegetation and ins	ects
Type of Farming	Stage	Field	Agro-metrological advisories
Carp culture	nurseries	Pond and water	 Water depth should be maintained at 1.0-1.5m. pH of pond water should be maintained at 7.0-7.5 if lower than the above agri-lime should be applied @250kg/ha at valley and 300kg at hilly areas.
		Fish	1.0-10.0 million spawn can be stock in 1 ha pond
Carp culture	Grow -out	Pond and water	 Water depth should be maintained at 1.0-1.5m. Regular manuring at interval of 30 days should be done with a slurry of RCD @1500kg/ha. Agri-lime may be applied @250kg/ha at valley and 300kg at hilly areas. Greenish colouration of water is desirable if any change in colour, odour of water half of the water should be drained out and change with fresh water.
		Fish	 8000-10,000 fingerlings can be stocked in one ha in valley areas and 12,000-15,000 fingerlings can be stocked in hilly area Sampling of fish for growth, diseases (if any) should be done by regular netting.
Paddy cum fish culture	water		 Water depth of the trenches in paddy field should be maintained at 1.0m Application of insecticide/pesticide should be prohibited in paddy cum fish culture.



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



"Integrated Agromet Advisory Services"

MANIPUR BULLETIN 31st August, 2012

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 1st to 5th September, 2012 as given below:

Significant past weather for the preceding bi-weekly of Imphal- West (28th to 30th August, 2012)

During the past three days the sky was partly cloudy to cloudy. 43.9 mm rainfall was recorded during past three days. Maximum temperature range observed was 29.2-32.8 °C, range of minimum temperature observed was 21.5-22.5 °C, mean relative humidity observed in morning and afternoon were 85.5 % and 73.3 % respectively. The average wind speed range was 2.6-3.6 km/hr.

Weather forecast for next five days of Tamenglong (1st to 5th September, 2012)

During next five days, there is likely to have light rainfall. The sky is likely to remain mainly cloudy. The maximum temp. is likely to be 30.0 - 31.0 °C. The minimum temp. is likely to be 23.0 °C. The maximum RH is likely to attain a max value of 99 %. Minimum RH is likely to reach a max of 95 %. The average wind speed during next five days may reach upto max. value of 3 km/hr.

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
Field Crops			
Rice	Vegetative stage of short duration varieties of rice Tillering stage of		 - Maintain 8 -10 cm of water level. - Provide good drainage system to maintain the required amount of water in the field. - Maintain 8-10 cm of water level.
	normal crop		 Ensure that the required amount of water is maintained in the field. Repairing of bands should also be done to prevent leakage of water from the field. Top dress by applying 33kg Urea/ha at 25–30 days after transplanting.
Kharif maize	Cob maturity		- Mature cob must be harvested.
Soybean/ Groundnut	Vegetative	- Hairy caterpillar - Tikka disease	 If incidence of hairy caterpillar is observed, then spray Quinalphos 25 EC or Chloropyriphos 20 EC @ 2 ml/ lit of water. Carbendazim @ 0.5g / lit of water may be sprayed to control Tikka disease.
Blackgram	Sowing		Blackgram may be sown as alley crop at maturity stage of rice crop and in the upland fields where rice was not successful.
Storage			 To prevent the infestation of stored grains, attack of rodents and mould growth proper care must be taken. Provide proper ventilation or sun dry the bags/ grains on sunny days. Seeds of crops like maize, rapeseed, etc. must be stored in RC-seed bins after proper drying. Check for germination of seeds. Clean and dry the seeds.
Horticulture C	Crops		
Brinjal	Fruiting to harvesting	Fruit and shoot borer	- Avoid the use of chemical pesticides. Instead, use sex hormone lure of <i>Lencinodes orbonolis</i> as it is in harvesting stage.
Turmeric	Top dressing		- Follow inter-culture operation and earthing up Apply 40 kg DAP, 20 kg MOP in a hectare area.



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Passion fruit			- Spray Benlate @ 0.5g/lit of water or Cabendazim12% + Mancozeb 63%WP @ 1 mg/ lit of water.
		Termite	- For termite, soil application of Chloropyriphos 10%G @ 25kg/ha near the base of the vine is recommended.
French bean	Sowing		- Sowing may also be done in raised bed in low lying area. Sow both
& Broad bean	8		dwarf and pole type.
			- If already sown, provide mulching material or give minimum
			watering at least once or twice in a week as required.
Cowpea	Fruiting	Pod borer	- Use sex pheromone lure of <i>Helicoverpa armigera</i> as it is in bearing
			stage
Tomato	Harvesting of		Harvest the green mature fruits before ripening, i.e., before the fruits
	early crop		turn red in colour to extend its keeping quality and to avoid market glut
			or follow added programmes.
Cauliflower/	Nursery to		- Soil treatment with Captan 50WP or with formaldehyde is very
Cabbage/	transplanting and		essential. Seed treatment is also good as prophylactic measure.
Broccoli	early vegetative		- Select slightly colder area for sowing area.
			- Spray Malathion or Monocrotophos against mealy bug and aphid as
			prophylactic measure in those area where incidence of these insect pest
			had been reported in past.
			- Transplant the saplings into the main field if the nursery is ready.
			- Light irrigation may be provided to the crops that has been already
			transplanted in foothills and slightly upper area.
Animal Science		T =	
Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
	All susceptible	Endoparasite	- Deworm with Piperazine hexahyderate @ 50ml /100 birds in drinking
Poultry	age groups		water once every month.
		Coccidiosis	- Administer Coximar @ 3g/5 lit of water as preventive measure
			against Coccidiosis for 4 days.
		Ranikhet	- Vaccinate with strain live vaccine @ one drop on eyes or nostril.
			at 7th day.
			- Give R2B vaccine at the age of 45-60 days @0.5 ml (intra-
			muscularly).
			- If the litter material has become moist then apply lime powder @ 1
			kg/ 100ft ² area.
			- Spray disinfectant B-904 @ 4 ml/lit of water around the farm
			premises.
Cattle /	All susceptible	Fascioliosis	- Deworm using Oxyclonazide @ 10-15 mg/ kg body weght.
Buffalo	age groups	Skin infection	- Use Butox @ 2 ml/lit of water while brushing the animal.
			- For new born calf, administer tetracycline (tab. Or powder) @ 5mg/
			kg body weight consecutively for 4 days.
		<u> </u>	- Vaccinate the animals above 3 months of age against FMD, HS & BQ
Goat/ Sheep	All susceptible	Endoparasite	- Deworm against Fascioliasis using Oxyclonazide @ 15 mg/ kg body
	age groups		weight.
			- Give Tetramizole hydrochloride @ 15mg/kg body weight (single
	i e	1	dose).
		Haemorrhagic Septicemia	- Vaccinate against H.S. @ 2 ml sub-cutaneously.



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



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Pig	Above 3 months of age	Endoparasitic Swine Fever	 De-worm using Albendazole @ 1 ml/3 kg body weight orally once only. Vaccinate against Swine Fever after 3 months of age.
	All susceptible age groups	Coccidiosis	 Advocate Metaprim @ 2g/ 10 kg body weight for 5-7 days. Use Butox @ 2 ml/lit of water while brushing the animal.
Fisheries			
* Ponds should	be free from unwant	ted vegetation and ins	ects
Type of Farming	Stage	Field	Agro-metrological advisories
Carp culture	nurseries	Pond and water	 Water depth should be maintained at 1.0-1.5m. pH of pond water should be maintained at 7.0-7.5 if lower than the above agri-lime should be applied @250kg/ha at valley and 300kg at hilly areas.
		Fish	1.0-10.0 million spawn can be stock in 1 ha pond
Carp culture	Grow -out	Pond and water	 Water depth should be maintained at 1.0-1.5m. Regular manuring at interval of 30 days should be done with a slurry of RCD @1500kg/ha. Agri-lime may be applied @250kg/ha at valley and 300kg at hilly areas. Greenish colouration of water is desirable if any change in colour, odour of water half of the water should be drained out and change with fresh water.
		Fish	 8000-10,000 fingerlings can be stocked in one ha in valley areas and 12,000-15,000 fingerlings can be stocked in hilly area Sampling of fish for growth, diseases (if any) should be done by regular netting.
Paddy cum fish culture	water		 Water depth of the trenches in paddy field should be maintained at 1.0m Application of insecticide/pesticide should be prohibited in paddy cum fish culture.



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"Integrated Agromet Advisory Services"

MANIPUR BULLETIN 31st August, 2012

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 1st to 5th September, 2012 as given below:

Significant past weather for the preceding bi-weekly of Imphal- West (28th to 30th August, 2012)

During the past three days the sky was partly cloudy to cloudy. 43.9 mm rainfall was recorded during past three days. Maximum temperature range observed was 29.2-32.8 °C, range of minimum temperature observed was 21.5-22.5 °C, mean relative humidity observed in morning and afternoon were 85.5 % and 73.3 % respectively. The average wind speed range was 2.6-3.6 km/hr.

Weather forecast for next five days of Thoubal (1st to 5th September, 2012)

During next five days, there is likely to have light rainfall. The sky is likely to remain mainly cloudy. The maximum temp. is likely to be 25.0 - 28.0 $^{\circ}\text{C}$. The minimum temp. is likely to be 20.0 - 21.0 $^{\circ}\text{C}$. The maximum RH is likely to attain a max value of 100 %. Minimum RH is likely to reach a max of 90 %. The average wind speed during next five days may reach upto max. value of 4 km/hr.

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
Field Crops			
Rice	Vegetative stage of short duration varieties of rice Tillering stage of normal crop		 Maintain 10-15 cm of water level. Provide good drainage system to maintain the required amount of water in the field. Maintain 8-10 cm of water level. Ensure that the required amount of water is maintained in the field. Repairing of bands should also be done to prevent leakage of water
			from the field Top dress by applying 33kg Urea/ha at 25–30 days after transplanting.
Kharif maize	Cob maturity		- Mature cob must be harvested.
Soybean/ Groundnut	Vegetative	- Hairy caterpillar - Tikka disease	 If incidence of hairy caterpillar is observed, then spray Quinalphos 25 EC or Chloropyriphos 20 EC @ 2 ml/ lit of water. Carbendazim @ 0.5g / lit of water may be sprayed to control Tikka disease.
Blackgram	Sowing		Blackgram may be sown as alley crop at maturity stage of rice crop and in the upland fields where rice was not successful.
Storage			 To prevent the infestation of stored grains, attack of rodents and mould growth proper care must be taken. Provide proper ventilation or sun dry the bags/ grains on sunny days. Seeds of crops like maize, rapeseed, etc. must be stored in RC-seed bins after proper drying. Check for germination of seeds. Clean and dry the seeds.
Horticulture C	Crops		
Brinjal	Fruiting to harvesting	Fruit and shoot borer	- Avoid the use of chemical pesticides. Instead, use sex hormone lure of <i>Lencinodes orbonolis</i> as it is in harvesting stage.
Turmeric	Top dressing		 Follow inter-culture operation and earthing up. Apply 40 kg DAP, 20 kg MOP in a hectare area.



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Passion fruit			- Spray Benlate @ 0.5g/lit of water or Cabendazim12% + Mancozeb 63%WP @ 1 mg/ lit of water.
		Termite	- For termite, soil application of Chloropyriphos 10%G @ 25kg/ha near the base of the vine is recommended.
French bean	Sowing		- Sowing may also be done in raised bed in low lying area. Sow both
& Broad bean	8		dwarf and pole type.
			- If already sown, provide mulching material or give minimum
			watering at least once or twice in a week as required.
Cowpea	Fruiting	Pod borer	- Use sex pheromone lure of <i>Helicoverpa armigera</i> as it is in bearing
			stage
Tomato	Harvesting of		Harvest the green mature fruits before ripening, i.e., before the fruits
	early crop		turn red in colour to extend its keeping quality and to avoid market glut
			or follow added programmes.
Cauliflower/	Nursery to		- Soil treatment with Captan 50WP or with formaldehyde is very
Cabbage/	transplanting and		essential. Seed treatment is also good as prophylactic measure.
Broccoli	early vegetative		- Select slightly colder area for sowing area.
			- Spray Malathion or Monocrotophos against mealy bug and aphid as
			prophylactic measure in those area where incidence of these insect pest
			had been reported in past.
			- Transplant the saplings into the main field if the nursery is ready.
			- Light irrigation may be provided to the crops that has been already
			transplanted in foothills and slightly upper area.
Animal Science		T =	
Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
	All susceptible	Endoparasite	- Deworm with Piperazine hexahyderate @ 50ml /100 birds in drinking
Poultry	age groups		water once every month.
		Coccidiosis	- Administer Coximar @ 3g/5 lit of water as preventive measure
			against Coccidiosis for 4 days.
		Ranikhet	- Vaccinate with strain live vaccine @ one drop on eyes or nostril.
			at 7th day.
			- Give R2B vaccine at the age of 45-60 days @0.5 ml (intra-
			muscularly).
			- If the litter material has become moist then apply lime powder @ 1
			kg/ 100ft ² area.
			- Spray disinfectant B-904 @ 4 ml/lit of water around the farm
			premises.
Cattle /	All susceptible	Fascioliosis	- Deworm using Oxyclonazide @ 10-15 mg/ kg body weght.
Buffalo	age groups	Skin infection	- Use Butox @ 2 ml/lit of water while brushing the animal.
			- For new born calf, administer tetracycline (tab. Or powder) @ 5mg/
			kg body weight consecutively for 4 days.
		<u> </u>	- Vaccinate the animals above 3 months of age against FMD, HS & BQ
Goat/ Sheep	All susceptible	Endoparasite	- Deworm against Fascioliasis using Oxyclonazide @ 15 mg/ kg body
	age groups		weight.
			- Give Tetramizole hydrochloride @ 15mg/kg body weight (single
	i e	1	dose).
		Haemorrhagic Septicemia	- Vaccinate against H.S. @ 2 ml sub-cutaneously.



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Pig	Above 3 months of age	Endoparasitic Swine Fever	 De-worm using Albendazole @ 1 ml/3 kg body weight orally once only. Vaccinate against Swine Fever after 3 months of age.
	All susceptible age groups	Coccidiosis	 Advocate Metaprim @ 2g/ 10 kg body weight for 5-7 days. Use Butox @ 2 ml/lit of water while brushing the animal.
Fisheries			
* Ponds should	be free from unwant	ted vegetation and ins	ects
Type of Farming	Stage	Field	Agro-metrological advisories
Carp culture	nurseries	Pond and water	 Water depth should be maintained at 1.0-1.5m. pH of pond water should be maintained at 7.0-7.5 if lower than the above agri-lime should be applied @250kg/ha at valley and 300kg at hilly areas.
		Fish	1.0-10.0 million spawn can be stock in 1 ha pond
Carp culture	Grow -out	Pond and water	 Water depth should be maintained at 1.0-1.5m. Regular manuring at interval of 30 days should be done with a slurry of RCD @1500kg/ha. Agri-lime may be applied @250kg/ha at valley and 300kg at hilly areas. Greenish colouration of water is desirable if any change in colour, odour of water half of the water should be drained out and change with fresh water.
		Fish	 8000-10,000 fingerlings can be stocked in one ha in valley areas and 12,000-15,000 fingerlings can be stocked in hilly area Sampling of fish for growth, diseases (if any) should be done by regular netting.
Paddy cum fish culture	water		 Water depth of the trenches in paddy field should be maintained at 1.0m Application of insecticide/pesticide should be prohibited in paddy cum fish culture.



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"Integrated Agromet Advisory Services"

MANIPUR BULLETIN 31st August, 2012

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 1st to 5th September, 2012 as given below:

Significant past weather for the preceding bi-weekly of Imphal- West (28th to 30th August, 2012)

During the past three days the sky was partly cloudy to cloudy. 43.9 mm rainfall was recorded during past three days. Maximum temperature range observed was 29.2-32.8 °C, range of minimum temperature observed was 21.5-22.5 °C, mean relative humidity observed in morning and afternoon were 85.5 % and 73.3 % respectively. The average wind speed range was 2.6-3.6 km/hr.

Weather forecast for next five days of Ukhrul (1st to 5th September, 2012)

During next five days, there is likely to have light rainfall. The sky is likely to remain mainly cloudy. The maximum temp. is likely to be 25.0 - 28.0 °C. The minimum temp. is likely to be 19.0 - 21.0 °C. The RH is likely to remain above 88 % during next five days. The average wind speed during next five days may reach upto max. value of 3 km/hr.

Name of the	Stage	Pest and disease	Agro-meteorological advisories
crop		infestation	
Field Crops	l		
-	Vegetative stage of		- Maintain 8 -10 cm of water level.
Rice	short duration		- Provide good drainage system to maintain the required amount of
	varieties of rice		water in the field.
	Tillering stage of		- Maintain 8-10 cm of water level.
	normal crop		- Ensure that the required amount of water is maintained in the field.
			Repairing of bands should also be done to prevent leakage of water
			from the field.
			- Top dress by applying 33kg Urea/ha at 25–30 days after
			transplanting.
Kharif maize	Cob maturity		- Mature cob must be harvested.
Soybean	Vegetative	- Hairy caterpillar	- If incidence of hairy caterpillar is observed, then spray Quinalphos 25
			EC or Chloropyriphos 20 EC @ 2 ml/ lit of water.
Blackgram	Sowing		Blackgram may be sown as alley crop at maturity stage of rice crop and
			in the upland fields where rice was not successful.
Storage			- To prevent the infestation of stored grains, attack of rodents and
			mould growth proper care must be taken. Provide proper ventilation or
			sun dry the bags/ grains on sunny days.
			- Seeds of crops like maize, rapeseed, etc. must be stored in RC-seed
			bins after proper drying. Check for germination of seeds. Clean and dry the seeds.
Handiaultuma C			tile seeds.
Horticulture C		Engle on 1 .1	A siddle of Carried and ideal and a transfer to the control of the
Brinjal		Fruit and shoot	- Avoid the use of chemical pesticides. Instead, use sex hormone lure
Turmorio		borer	of Lencinodes orbonolis as it is in harvesting stage.
Turmeric	Top dressing		- Follow inter-culture operation and earthing up.
C	Equiting	Pod borer	- Apply 40 kg DAP, 20 kg MOP in a hectare area.
Cowpea	Fruiting	rou borer	- Use sex pheromone lure of <i>Helicoverpa armigera</i> as it is in bearing stage



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Passion fruit			- Spray Benlate @ 0.5g/lit of water or Cabendazim12% + Mancozeb 63%WP @ 1 mg/ lit of water.
		Termite	- For termite, soil application of Chloropyriphos 10%G @ 25kg/ha near the base of the vine is recommended.
French bean	Sowing		- Sowing may also be done in raised bed in low lying area. Sow both
& Broad bean			dwarf and pole type.
			- If already sown, provide mulching material or give minimum
			watering at least once or twice in a week as required.
Cole crop	Nursery to		- Soil treatment with Captan 50WP or with formaldehyde is very
	transplanting and		essential. Seed treatment is also good as prophylactic measure.
	early vegetative		- Select slightly colder area for sowing area.
			- Spray Malathion or Monocrotophos against mealy bug and aphid as
			prophylactic measure in those area where incidence of these insect pest
			had been reported in past.
			- Transplant the saplings into the main field if the nursery is ready.
			- Light irrigation may be provided to the crops that has been already
			transplanted in foothills and slightly upper area.
Animal Science		T (A. A	
Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
	All susceptible	Endoparasite	- Deworm with Piperazine hexahyderate @ 50ml /100 birds in drinking
Poultry	age groups		water once every month.
		Coccidiosis	- Administer Coximar @ 3g/5 lit of water as preventive measure
			against Coccidiosis for 4 days.
		Ranikhet	- Vaccinate with strain live vaccine @ one drop on eyes or nostril.
			at 7th day.
			- Give R2B vaccine at the age of 45-60 days @0.5 ml (intra-
			muscularly).
			- If the litter material has become moist then apply lime powder @ 1
			kg/ 100ft ² area.
			- Spray disinfectant B-904 @ 4 ml/lit of water around the farm
			premises.
Cattle /	All susceptible	Fascioliosis	- Deworm using Oxyclonazide @ 10-15 mg/ kg body weght.
Buffalo	age groups	Skin infection	- Use Butox @ 2 ml/lit of water while brushing the animal.
			- For new born calf, administer tetracycline (tab. Or powder) @ 5mg/
			kg body weight consecutively for 4 days.
			- Vaccinate the animals above 3 months of age against FMD, HS & BQ
Goat/ Sheep	All susceptible	Endoparasite	- Deworm against Fascioliasis using Oxyclonazide @ 15 mg/ kg body
	age groups		weight.
			- Give Tetramizole hydrochloride @ 15mg/kg body weight (single
			dose).
		Haemorrhagic	- Vaccinate against H.S. @ 2 ml sub-cutaneously.
	1	Septicemia	



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Pig	Above 3 months of age	Endoparasitic Swine Fever	 De-worm using Albendazole @ 1 ml/3 kg body weight orally once only. Vaccinate against Swine Fever after 3 months of age.
	All susceptible age groups	Coccidiosis	 Advocate Metaprim @ 2g/ 10 kg body weight for 5-7 days. Use Butox @ 2 ml/lit of water while brushing the animal.
Fisheries			
* Ponds should	be free from unwant	ted vegetation and ins	ects
Type of Farming	Stage	Field	Agro-metrological advisories
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		Fish	1.0-10.0 million spawn can be stock in 1 ha pond
Carp culture	Grow -out	Pond and water	 Water depth should be maintained at 1.0-1.5m. Regular manuring at interval of 30 days should be done with a slurry of RCD @1500kg/ha. Agri-lime may be applied @250kg/ha at valley and 300kg at hilly areas. Greenish colouration of water is desirable if any change in colour, odour of water half of the water should be drained out and change with fresh water.
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Paddy cum fish culture	water		 Water depth of the trenches in paddy field should be maintained at 1.0m Application of insecticide/pesticide should be prohibited in paddy cum fish culture.