

Phone: 2414654, 2414260, 2414749; Fax: (0385) 2414654, 2414749

Manipur Centre, Lamphelpat, Imphal - 795 004





"Gramin Krishi Mausam Seva"

MANIPUR BULLETIN 21st April, 2017

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 22 nd to 26th April, 2017 as below:

Significant past weather for the preceding bi-weekly of Imphal - West (18th to 20th morning April, 2017)

Observed mainly clear on 18th then overcast sky on 19th & 20th and 5.5 mm rainfall was recorded during past three days. Maximum temperature range of 25.0 to 27.6 $^{\circ}$ C and minimum temperature range of 15.0 to 19.1 $^{\circ}$ C with mean relative humidity 74.7 % max and 52 % min was recorded in the past three days.

Weather forecast for next five days of Bishnupur (22nd to 26th April, 2017)

Likely to have widespread heavy rainfall at isolated places very likely upto 23rd April and partly cloudy to overcast sky with maximum temp. 24-25 °C & minimum temp. 19-20 °C. Relative humidity may reach up to 99 % (max RH) & 92 % (min RH). The average wind speed may be 2-4 km/hr.

Field Crops			
* Harvest rain water	. Construct proper dra	ainage system to avo	oid water logging.
* Cultural practices	are not advised durin	g rainy days.	
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Rice	Tillering (Pre-kharif rice) Land preparation (Main kharif rice)		 - Maintain 5-8cm of water level. - Hand weeding may be done. Drain out excess water and top dress with Urea @33kg /ha and MOP @22kg/ha. Irrigate again after 48 hours of fertilizer application. - Application of 30kg Carbofuran (3G)/ ha with first top dressing of fertilizer to protect crop from insect pest and nematodes. - Prepare main plots for ploughing.
Rabi maize	Cob formation		- Avoid water logging by constructing proper drainage system.
Kharif Maize	Land preparation		- Land preparation for sowing kharif maize may be done.
Seeds storage	Post harvest management		 - For seed purpose dry, clean and store the seeds in <i>RC-seed bins</i> after proper drying of seeds along with charcoal at 80:20. Check for moisture content or weight of seeds. - For grains, store grains in well ventilated godowns after drying proper. Spray Malathion 1% in <i>godowns</i>.

Horticulture Crops

^{*} The water logged crop field may take more than a month to drain out excess water and come up to optimum soil moisture level for cultivation, hence it will be helpful if 8-10% of the water logged area is converted into water harvesting pond which may serve to maintain continuous water supply for irrigation in future

irrigation in future.		1	
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
French Bean	Vegetative		- Construct proper drainage system to avoid water logging.
Cucurbits	Vegetative		- Construct proper drainage system to avoid water logging.
Bhindi	Vegetative		- Construct proper drainage system to avoid water logging.
Chilli/ capsicum	Vegetative		In chilies and capsicum, spray Sixer (Carbendazim 12% WP + Mancozeb 63% WP) @ 2 g/ litre of water to control the fungal attack after rains. - Construct proper drainage system to avoid water logging.
Tomato/ Brinjal	Vegetative		 - After rains apply 38kg Urea+ 125kg SSP+ 24kg MOP per sangam as basal dose and 25kg Urea after 25-30days after tansplanting. - Construct proper drainage system to avoid water logging.
Onion/ Garlic	Bulb formation	Purple Bloch	 Construct proper drainage system to avoid water logging. Apply 1kg Trichoderma viride/ sangam when there is moisture in soil and avoid
	Maturity		excess application of Nitrogen in case of onion and garlic to avoid Purple Bloch. - Let the plants grow as such in the field. - Do not harvest/ uproot at present. - Let the mature plants dry in the sun for at least 7-10 days or more depending upon the stage.

Animal Sciences

^ Provide clean drinking water for birds and animals.				
Name of bird/ animal	Stage	Disease and Management	Agro-meteorological advisories	



Manipur Centre, Lamphelpat, Imphal - 795 004





Poultry (Chicken/ Turkey/ Duck)	All age groups	Ranikhet disease	At the end of winter season and starting of spring season by March, there may be outbreaks of Ranikhet Disease, hence vaccinate all birds against Ranikhet Diseases in this time. 1. F-1 Strain may be first administered within 7 days of age and second dose may be given at 30days for all birds. 2. R ₂ B vaccine of 8-9 weeks of age group birds (layers). 3. Killed ND virus vaccine of 16-18 weeks of age group birds (layers).
		Fowl Pox	Vaccinate against fowl pox.
		Deworming	➤ Use Albendazole liquid @ 20-40 ml for 100 adult birds and repeat it next day with half the dose at regular interval of 3 weeks.
	All age groups	Vaccination	- Vaccinate against Enterotoxemia and sheep pox.
Sheep/ Goat	excepts the young	Management	- Pregnant animal (more than 6 months) should be given additional feed.
Shoop, Cour	ones	Mineral feeding to protect (PICA)	- Mineral mixtures are to be supplemented.
		Deworming	New born but not yet been dewormed should be given deworming agent.
		De-worming	➤ De-worming of animals should be done using Abendazole/ Levamisole @7.5 mg/kg b.wt. or Ivermectin @50mg/kg b. wt.
Diα	All age groups	Mineral feeding	➤ Provide mineral mixture.
Pig	except the young ones	Care and management	Provide clean water (drinking). Add antibiotics in feed and water. Vaccinate against FMD.
		Mites infestation	Spray with Skin Heal Spray in sufficient quantity.
	All age groups	Fodder cultivation	➤ Maize/ Jowar/ Bajra sown as fodder crop may be harvested after 45-50 days.
Cattle	excepts the young	Ectoparasites	- Butox@ 2ml/lit of water at forth nightly interval.
	ones	Mastitis	Animals should be milked completely.
		Management	- Some female animals may get agitated due to the heat especially during night time, protect and take care of it.
T7 1 .			

Fisheries

- * Encircle ponds to avoid escape of fishes.
- * New fish ponds may be dug out and old ones may be renovated/ cleaned before for large scale fish culture.
- * Care must be taken for newly rain fed ponds by liming for stocking fish fries/ fingerlings or yearlings.
- * Intensive care must be taken for fish brooders by keeping them in separate ponds. It must be provided with well balanced feed and good quality water.
- * Avoid rain water to get drain down directly into the culture pond.



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MANIPUR BULLETIN

21st April, 2017

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 22 nd to 26th April, 2017 as below:

Significant past weather for the preceding bi-weekly of Imphal - West (18th to 20th morning April, 2017)

Observed mainly clear on 18^{th} then overcast sky on 19^{th} & 20^{th} and 5.5 mm rainfall was recorded during past three days. Maximum temperature range of 25.0 to 27.6 °C and minimum temperature range of 15.0 to 19.1 °C with mean relative humidity 74.7 % max and 52 % min was recorded in the past three days.

Weather forecast for next five days of Chandel (22nd to 26th April, 2017)

Likely to have widespread heavy rainfall at isolated places very likely upto 23^{rd} April and partly cloudy to overcast sky with maximum temp. $26-27~^{\circ}$ C & minimum temp. $19-20~^{\circ}$ C. Relative humidity may reach up to 98~% (max RH) & 91~% (min RH). The average wind speed may be 2-4~km/hr.

Agro-meteorological advisories

Field Crops			
* Harvest rain water	Construct proper dra	ainage system to avo	oid water logging.
* Cultural practices	are not advised during	g rainy days.	
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Rice	Tillering (Pre-kharif rice) Land preparation (Main kharif rice)		 - Maintain 5-8cm of water level. - Hand weeding may be done. Drain out excess water and top dress with Urea @33kg /ha and MOP @22kg/ha. Irrigate again after 48 hours of fertilizer application. - Application of 30kg Carbofuran (3G)/ ha with first top dressing of fertilizer to protect crop from insect pest and nematodes. - Prepare main plots for ploughing.
Rabi maize	Cob formation		- Avoid water logging by constructing proper drainage system.
Kharif Maize	Land preparation		- Land preparation for sowing kharif maize may be done.
Seeds storage	Post harvest management		 For seed purpose dry, clean and store the seeds in <i>RC-seed bins</i> after proper drying of seeds along with charcoal at 80:20. Check for moisture content or weight of seeds. For grains, store grains in well ventilated godowns after drying proper. Spray Malathion 1% in <i>godowns</i>.

Horticulture Crops

Name of the animal

Name of bird/animal

* Provide clean drinking water for birds and animals.

Stage

^{*} The water logged crop field may take more than a month to drain out excess water and come up to optimum soil moisture level for cultivation, hence it will be helpful if 8-10% of the water logged area is converted into water harvesting pond which may serve to maintain continuous water supply for irrigation in future.

Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
French Bean	Vegetative		- Construct proper drainage system to avoid water logging.
Cucurbits	Vegetative		- Construct proper drainage system to avoid water logging.
Bhindi	Vegetative		- Construct proper drainage system to avoid water logging.
Chilli/ capsicum	Vegetative		In chilies and capsicum, spray Sixer (Carbendazim 12% WP + Mancozeb 63% WP) @ 2 g/ litre of water to control the fungal attack after rains. - Construct proper drainage system to avoid water logging.
Tomato/ Brinjal	Vegetative		 After rains apply 38kg Urea+ 125kg SSP+ 24kg MOP per sangam as basal dose and 25kg Urea after 25-30days after tansplanting. Construct proper drainage system to avoid water logging.
Onion/ Garlic			- Construct proper drainage system to avoid water logging.
	Bulb formation	Purple Bloch	- Apply 1kg Trichoderma viride/ sangam when there is moisture in soil and avoid excess application of Nitrogen in case of onion and garlic to avoid Purple Bloch.
	Maturity		 Let the plants grow as such in the field. Do not harvest/ uproot at present. Let the mature plants dry in the sun for at least 7-10 days or more depending upon the stage.

Disease and

Management



Manipur Centre, Lamphelpat, Imphal - 795 004





Poultry (Chicken/ Turkey/ Duck)	All age groups	Ranikhet disease	At the end of winter season and starting of spring season by March, there may be outbreaks of Ranikhet Disease, hence vaccinate all birds against Ranikhet Diseases in this time. 1. F-1 Strain may be first administered within 7 days of age and second dose may be given at 30days for all birds. 2. R ₂ B vaccine of 8-9 weeks of age group birds (layers). 3. Killed ND virus vaccine of 16-18 weeks of age group birds (layers).
		Fowl Pox	Vaccinate against fowl pox.
		Deworming	➤ Use Albendazole liquid @ 20-40 ml for 100 adult birds and repeat it next day with half the dose at regular interval of 3 weeks.
	All age groups	Vaccination	- Vaccinate against Enterotoxemia and sheep pox.
Sheep/ Goat	excepts the young	Management	- Pregnant animal (more than 6 months) should be given additional feed.
Shoop, Cour	ones	Mineral feeding to protect (PICA)	- Mineral mixtures are to be supplemented.
		Deworming	New born but not yet been dewormed should be given deworming agent.
		De-worming	➤ De-worming of animals should be done using Abendazole/ Levamisole @7.5 mg/kg b.wt. or Ivermectin @50mg/kg b. wt.
Diα	All age groups	Mineral feeding	➤ Provide mineral mixture.
Pig	except the young ones	Care and management	Provide clean water (drinking). Add antibiotics in feed and water. Vaccinate against FMD.
		Mites infestation	Spray with Skin Heal Spray in sufficient quantity.
	All age groups	Fodder cultivation	Maize/ Jowar/ Bajra sown as fodder crop may be harvested after 45-50 days.
Cattle	excepts the young	Ectoparasites	- Butox@ 2ml/lit of water at forth nightly interval.
	ones	Mastitis	Animals should be milked completely.
		Management	- Some female animals may get agitated due to the heat especially during night time, protect and take care of it.
T7 1 .			

Fisheries

- * Encircle ponds to avoid escape of fishes.
- * New fish ponds may be dug out and old ones may be renovated/ cleaned before for large scale fish culture.
- * Care must be taken for newly rain fed ponds by liming for stocking fish fries/ fingerlings or yearlings.
- * Intensive care must be taken for fish brooders by keeping them in separate ponds. It must be provided with well balanced feed and good quality water.
- * Avoid rain water to get drain down directly into the culture pond.



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21st April, 2017

Churachandpur

IAAS, ICAR-RC Manipur Centre in association with India Meteorological Department, Regional Meteorological Centre, Guwahati and Northern Hemisphere Analysis Centre, New Delhi, Ministry of Earth Science, Govt. of India reports the weather forecasts for the next five days, i.e., from 22 nd to 26th April, 2017 as below:

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Observed mainly clear on 18th then overcast sky on 19th & 20th and 5.5 mm rainfall was recorded during past three days. Maximum temperature range of 25.0 to 27.6 $^{\circ}$ C and minimum temperature range of 15.0 to 19.1 $^{\circ}$ C with mean relative humidity 74.7 % max and 52 % min was recorded in the past three days.

Weather forecast for next five days of Churachandpur (22nd to 26th April, 2017)

Likely to have widespread heavy rainfall at isolated places very likely upto 23rd April and partly cloudy to overcast sky with maximum temp. 23-24 °C & minimum temp. 16-18 °C. Relative humidity may reach up to 99 % (max RH) & 94 % (min RH). The average wind speed may be 3-4 km/hr.

Field Crops			
* Harvest rain water.	Construct proper dra	ninage system to avo	oid water logging.
* Cultural practices a	are not advised during	g rainy days.	
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Rice	Tillering (Pre-kharif rice) Land preparation (Main kharif rice)		 - Maintain 5-8cm of water level. - Hand weeding may be done. Drain out excess water and top dress with Urea @33kg /ha and MOP @22kg/ha. Irrigate again after 48 hours of fertilizer application. - Application of 30kg Carbofuran (3G)/ ha with first top dressing of fertilizer to protect crop from insect pest and nematodes. - Prepare main plots for ploughing.
Rabi maize	Cob formation		- Avoid water logging by constructing proper drainage system.
Kharif Maize	Land preparation		- Land preparation for sowing kharif maize may be done.
Seeds storage	Post harvest management		 For seed purpose dry, clean and store the seeds in <i>RC-seed bins</i> after proper drying of seeds along with charcoal at 80:20. Check for moisture content or weight of seeds. For grains, store grains in well ventilated godowns after drying proper. Spray Malathion 1% in <i>godowns</i>.

Horticulture Crops

^{*} The water logged crop field may take more than a month to drain out excess water and come up to optimum soil moisture level for cultivation, hence it will be helpful if 8-10% of the water logged area is converted into water harvesting pond which may serve to maintain continuous water supply for irrigation in future

irrigation in future.		1	
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
French Bean	Vegetative		- Construct proper drainage system to avoid water logging.
Cucurbits	Vegetative		- Construct proper drainage system to avoid water logging.
Bhindi	Vegetative		- Construct proper drainage system to avoid water logging.
Chilli/ capsicum	Vegetative		In chilies and capsicum, spray Sixer (Carbendazim 12% WP + Mancozeb 63% WP) @ 2 g/ litre of water to control the fungal attack after rains. - Construct proper drainage system to avoid water logging.
Tomato/ Brinjal	Vegetative		 - After rains apply 38kg Urea+ 125kg SSP+ 24kg MOP per sangam as basal dose and 25kg Urea after 25-30days after tansplanting. - Construct proper drainage system to avoid water logging.
Onion/ Garlic	Bulb formation	Purple Bloch	 Construct proper drainage system to avoid water logging. Apply 1kg Trichoderma viride/ sangam when there is moisture in soil and avoid
	Maturity		excess application of Nitrogen in case of onion and garlic to avoid Purple Bloch. - Let the plants grow as such in the field. - Do not harvest/ uproot at present. - Let the mature plants dry in the sun for at least 7-10 days or more depending upon the stage.

Animal Sciences

^ Provide clean drinking water for birds and animals.				
Name of bird/ animal	Stage	Disease and Management	Agro-meteorological advisories	



Manipur Centre, Lamphelpat, Imphal - 795 004





Poultry (Chicken/ Turkey/ Duck)	All age groups	Ranikhet disease	At the end of winter season and starting of spring season by March, there may be outbreaks of Ranikhet Disease, hence vaccinate all birds against Ranikhet Diseases in this time. 1. F-1 Strain may be first administered within 7 days of age and second dose may be given at 30days for all birds. 2. R ₂ B vaccine of 8-9 weeks of age group birds (layers). 3. Killed ND virus vaccine of 16-18 weeks of age group birds (layers).
		Fowl Pox	Vaccinate against fowl pox.
		Deworming	➤ Use Albendazole liquid @ 20-40 ml for 100 adult birds and repeat it next day with half the dose at regular interval of 3 weeks.
	All age groups	Vaccination	- Vaccinate against Enterotoxemia and sheep pox.
Sheep/ Goat	excepts the young	Management	- Pregnant animal (more than 6 months) should be given additional feed.
Shoop, Cour	ones	Mineral feeding to protect (PICA)	- Mineral mixtures are to be supplemented.
		Deworming	New born but not yet been dewormed should be given deworming agent.
		De-worming	➤ De-worming of animals should be done using Abendazole/ Levamisole @7.5 mg/kg b.wt. or Ivermectin @50mg/kg b. wt.
Diα	All age groups	Mineral feeding	➤ Provide mineral mixture.
Pig	except the young ones	Care and management	Provide clean water (drinking). Add antibiotics in feed and water. Vaccinate against FMD.
		Mites infestation	Spray with Skin Heal Spray in sufficient quantity.
	All age groups	Fodder cultivation	Maize/ Jowar/ Bajra sown as fodder crop may be harvested after 45-50 days.
Cattle	excepts the young	Ectoparasites	- Butox@ 2ml/lit of water at forth nightly interval.
	ones	Mastitis	Animals should be milked completely.
		Management	- Some female animals may get agitated due to the heat especially during night time, protect and take care of it.
T7 1 .			

Fisheries

- * Encircle ponds to avoid escape of fishes.
- * New fish ponds may be dug out and old ones may be renovated/ cleaned before for large scale fish culture.
- * Care must be taken for newly rain fed ponds by liming for stocking fish fries/ fingerlings or yearlings.
- * Intensive care must be taken for fish brooders by keeping them in separate ponds. It must be provided with well balanced feed and good quality water.
- * Avoid rain water to get drain down directly into the culture pond.



Manipur Centre, Lamphelpat, Imphal - 795 004





MANIPUR BULLETIN

21st April, 2017

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 22 nd to 26th April, 2017 as below:

Significant past weather for the preceding bi-weekly of Imphal - West (18th to 20th morning April, 2017)

Observed mainly clear on 18th then overcast sky on 19th & 20th and 5.5 mm rainfall was recorded during past three days. Maximum temperature range of 25.0 to 27.6 $^{\circ}$ C and minimum temperature range of 15.0 to 19.1 $^{\circ}$ C with mean relative humidity 74.7 % max and 52 % min was recorded in the past three days.

Weather forecast for next five days of Senapati (22nd to 26th April, 2017)

Likely to have widespread heavy rainfall at isolated places very likely upto 23rd April and partly cloudy to overcast sky with maximum temp. 24 – 26 ° C & minimum temp. 18 - 20 °C. Relative humidity may reach up to 98 % (max RH) & 83 % (min RH). The average wind speed may be 0-2 km/hr.

Field Crops			
* Harvest rain water	. Construct proper dra	ainage system to avo	oid water logging.
* Cultural practices	are not advised during	g rainy days.	
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Rice	Tillering (Pre-kharif rice)		 - Maintain 5-8cm of water level. - Hand weeding may be done. Drain out excess water and top dress with Urea @33kg /ha and MOP @22kg/ha. Irrigate again after 48 hours of fertilizer application. - Application of 30kg Carbofuran (3G)/ ha with first top dressing of fertilizer to protect crop from insect pest and nematodes.
	Land preparation (Main kharif rice)		- Prepare main plots for ploughing.
Rabi maize	Cob formation		- Avoid water logging by constructing proper drainage system.
Kharif Maize	Land preparation		- Land preparation for sowing kharif maize may be done.
Seeds storage	Post harvest management		 For seed purpose dry, clean and store the seeds in <i>RC-seed bins</i> after proper drying of seeds along with charcoal at 80:20. Check for moisture content or weight of seeds. For grains, store grains in well ventilated godowns after drying proper. Spray Malathion 1% in <i>godowns</i>.

Horticulture Crops

* The water logged crop field may take more than a month to drain out excess water and come up to optimum soil moisture level for cultivation, hence it will be helpful if 8-10% of the water logged area is converted into water harvesting pond which may serve to maintain continuous water supply for irrigation in future.

Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
French Bean	Vegetative	1 cov tilla discuss	- Construct proper drainage system to avoid water logging.
Cucurbits	Vegetative		- Construct proper drainage system to avoid water logging.
Bhindi	Vegetative		- Construct proper drainage system to avoid water logging.
Chilli/ capsicum	Vegetative		In chilies and capsicum, spray Sixer (Carbendazim 12% WP + Mancozeb 63% WP) @ 2 g/ litre of water to control the fungal attack after rains. - Construct proper drainage system to avoid water logging.
Tomato/ Brinjal	Vegetative		 After rains apply 38kg Urea+ 125kg SSP+ 24kg MOP per sangam as basal dose and 25kg Urea after 25-30days after tansplanting. Construct proper drainage system to avoid water logging.
Onion/ Garlic			- Construct proper drainage system to avoid water logging.
	Bulb formation	Purple Bloch	- Apply 1kg Trichoderma viride/ sangam when there is moisture in soil and avoid excess application of Nitrogen in case of onion and garlic to avoid Purple Bloch.
	Maturity		 Let the plants grow as such in the field. Do not harvest/ uproot at present. Let the mature plants dry in the sun for at least 7-10 days or more depending upon the stage.

" Provide clean drinking water for birds and animals.					
f bird/ animal	Stage	Disease and Management	Agro-meteorological advisories		
f l	bird/ animal	bird/ animal Stage	bird/ animal Stage Disease and Management		



Manipur Centre, Lamphelpat, Imphal - 795 004





Poultry (Chicken/ Turkey/ Duck)	All age groups	Ranikhet disease	At the end of winter season and starting of spring season by March, there may be outbreaks of Ranikhet Disease, hence vaccinate all birds against Ranikhet Diseases in this time. 1. F-1 Strain may be first administered within 7 days of age and second dose may be given at 30days for all birds. 2. R ₂ B vaccine of 8-9 weeks of age group birds (layers). 3. Killed ND virus vaccine of 16-18 weeks of age group birds (layers).
		Fowl Pox	Vaccinate against fowl pox.
		Deworming	➤ Use Albendazole liquid @ 20-40 ml for 100 adult birds and repeat it next day with half the dose at regular interval of 3 weeks.
	All age groups	Vaccination	- Vaccinate against Enterotoxemia and sheep pox.
Sheep/ Goat	excepts the young	Management	- Pregnant animal (more than 6 months) should be given additional feed.
Shoop, Cour	ones	Mineral feeding to protect (PICA)	- Mineral mixtures are to be supplemented.
		Deworming	New born but not yet been dewormed should be given deworming agent.
		De-worming	➤ De-worming of animals should be done using Abendazole/ Levamisole @7.5 mg/kg b.wt. or Ivermectin @50mg/kg b. wt.
Diα	All age groups	Mineral feeding	➤ Provide mineral mixture.
Pig	except the young ones	Care and management	Provide clean water (drinking). Add antibiotics in feed and water. Vaccinate against FMD.
		Mites infestation	Spray with Skin Heal Spray in sufficient quantity.
	All age groups	Fodder cultivation	Maize/ Jowar/ Bajra sown as fodder crop may be harvested after 45-50 days.
Cattle	excepts the young	Ectoparasites	- Butox@ 2ml/lit of water at forth nightly interval.
	ones	Mastitis	Animals should be milked completely.
	ones	Management	- Some female animals may get agitated due to the heat especially during night time, protect and take care of it.
T7 1 .			

Fisheries

- * Encircle ponds to avoid escape of fishes.
- * New fish ponds may be dug out and old ones may be renovated/ cleaned before for large scale fish culture.
- * Care must be taken for newly rain fed ponds by liming for stocking fish fries/ fingerlings or yearlings.
- * Intensive care must be taken for fish brooders by keeping them in separate ponds. It must be provided with well balanced feed and good quality water.
- * Avoid rain water to get drain down directly into the culture pond.



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MANIPUR BULLETIN

21st April, 2017

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 22 nd to 26th April, 2017 as below:

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Observed mainly clear on 18th then overcast sky on 19th & 20th and 5.5 mm rainfall was recorded during past three days. Maximum temperature range of 25.0 to 27.6 $^{\circ}$ C and minimum temperature range of 15.0 to 19.1 $^{\circ}$ C with mean relative humidity 74.7 % max and 52 % min was recorded in the past three days.

Weather forecast for next five days of Tamenglong (22nd to 26th April, 2017)

Likely to have widespread heavy rainfall at isolated places very likely upto 23rd April and partly cloudy to overcast sky with maximum temp. 24 – 26 ° C & minimum temp. 18 - 20 °C. Relative humidity may reach up to 99 % (max RH) & 94 % (min RH). The average wind speed may be 0-2 km/hr.

Field Crops	Field Crops					
* Harvest rain water.			oid water logging.			
* Cultural practices a	are not advised durin	g rainy days.				
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories			
Rice	Tillering (Pre-kharif rice) Land preparation (Main kharif rice)		 - Maintain 5-8cm of water level. - Hand weeding may be done. Drain out excess water and top dress with Urea @33kg /ha and MOP @22kg/ha. Irrigate again after 48 hours of fertilizer application. - Application of 30kg Carbofuran (3G)/ ha with first top dressing of fertilizer to protect crop from insect pest and nematodes. - Prepare main plots for ploughing. 			
Rabi maize	Cob formation		- Avoid water logging by constructing proper drainage system.			
Kharif Maize	Land preparation		- Land preparation for sowing kharif maize may be done.			
Seeds storage	Post harvest management		 For seed purpose dry, clean and store the seeds in <i>RC-seed bins</i> after proper drying of seeds along with charcoal at 80:20. Check for moisture content or weight of seeds. For grains, store grains in well ventilated godowns after drying proper. Spray 			

Horticulture Crops

Malathion 1% in *godowns*.

Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
French Bean	Vegetative		- Construct proper drainage system to avoid water logging.
Cucurbits	Vegetative		- Construct proper drainage system to avoid water logging.
Bhindi	Vegetative		- Construct proper drainage system to avoid water logging.
Chilli/ capsicum	Vegetative		In chilies and capsicum, spray Sixer (Carbendazim 12% WP + Mancozeb 63% WP) @ 2 g/ litre of water to control the fungal attack after rains. - Construct proper drainage system to avoid water logging.
Tomato/ Brinjal	Vegetative		 After rains apply 38kg Urea+ 125kg SSP+ 24kg MOP per sangam as basal dose and 25kg Urea after 25-30days after tansplanting. Construct proper drainage system to avoid water logging.
Onion/ Garlic	Bulb formation		- Construct proper drainage system to avoid water logging.
		Purple Bloch	- Apply 1kg Trichoderma viride/ sangam when there is moisture in soil and avoid excess application of Nitrogen in case of onion and garlic to avoid Purple Bloch.
	Maturity		 - Let the plants grow as such in the field. - Do not harvest/ uproot at present. - Let the mature plants dry in the sun for at least 7-10 days or more depending
			upon the stage.

Animal Sciences

^ Provide clean drinking water for birds and animals.				
Name of bird/ animal	Stage	Disease and Management	Agro-meteorological advisories	

^{*} The water logged crop field may take more than a month to drain out excess water and come up to optimum soil moisture level for cultivation, hence it will be helpful if 8-10% of the water logged area is converted into water harvesting pond which may serve to maintain continuous water supply for irrigation in future



Manipur Centre, Lamphelpat, Imphal - 795 004





Poultry (Chicken/ Turkey/ Duck)	All age groups	Ranikhet disease	At the end of winter season and starting of spring season by March, there may be outbreaks of Ranikhet Disease, hence vaccinate all birds against Ranikhet Diseases in this time. 1. F-1 Strain may be first administered within 7 days of age and second dose may be given at 30days for all birds. 2. R ₂ B vaccine of 8-9 weeks of age group birds (layers). 3. Killed ND virus vaccine of 16-18 weeks of age group birds (layers).
		Fowl Pox	Vaccinate against fowl pox.
		Deworming	➤ Use Albendazole liquid @ 20-40 ml for 100 adult birds and repeat it next day with half the dose at regular interval of 3 weeks.
	All age groups	Vaccination	- Vaccinate against Enterotoxemia and sheep pox.
Sheep/ Goat	excepts the young	Management	- Pregnant animal (more than 6 months) should be given additional feed.
Shoop, Cour	ones	Mineral feeding to protect (PICA)	- Mineral mixtures are to be supplemented.
		Deworming	New born but not yet been dewormed should be given deworming agent.
		De-worming	➤ De-worming of animals should be done using Abendazole/ Levamisole @7.5 mg/kg b.wt. or Ivermectin @50mg/kg b. wt.
Diα	All age groups	Mineral feeding	➤ Provide mineral mixture.
Pig	except the young ones	Care and management	Provide clean water (drinking). Add antibiotics in feed and water. Vaccinate against FMD.
		Mites infestation	Spray with Skin Heal Spray in sufficient quantity.
	All age groups	Fodder cultivation	Maize/ Jowar/ Bajra sown as fodder crop may be harvested after 45-50 days.
Cattle	excepts the young	Ectoparasites	- Butox@ 2ml/lit of water at forth nightly interval.
	ones	Mastitis	Animals should be milked completely.
	ones	Management	- Some female animals may get agitated due to the heat especially during night time, protect and take care of it.
T7 1 .			

Fisheries

- * Encircle ponds to avoid escape of fishes.
- * New fish ponds may be dug out and old ones may be renovated/ cleaned before for large scale fish culture.
- * Care must be taken for newly rain fed ponds by liming for stocking fish fries/ fingerlings or yearlings.
- * Intensive care must be taken for fish brooders by keeping them in separate ponds. It must be provided with well balanced feed and good quality water.
- * Avoid rain water to get drain down directly into the culture pond.



Manipur Centre, Lamphelpat, Imphal - 795 004





MANIPUR BULLETIN

21st April, 2017

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 22 nd to 26th April, 2017 as below:

Significant past weather for the preceding bi-weekly of Imphal - West (18th to 20th morning April, 2017)

Observed mainly clear on 18th then overcast sky on 19th & 20th and 5.5 mm rainfall was recorded during past three days. Maximum temperature range of 25.0 to 27.6 $^{\circ}$ C and minimum temperature range of 15.0 to 19.1 $^{\circ}$ C with mean relative humidity 74.7 % max and 52 % min was recorded in the past three days.

Weather forecast for next five days of Thoubal (22nd to 26th April, 2017)

Likely to have widespread heavy rainfall at isolated places very likely upto 23rd April and partly cloudy to overcast sky with maximum temp. 24-26 °C & minimum temp. 19-20 °C. Relative humidity may reach up to 99 % (max RH) & 91 % (min RH). The average wind speed may be 2-4 km/hr.

Field Crops					
* Harvest rain water.			oid water logging.		
* Cultural practices a	are not advised during	g rainy days.			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories		
Rice	Tillering (Pre-kharif rice) Land preparation (Main kharif rice)		- Maintain 5-8cm of water level. - Hand weeding may be done. Drain out excess water and top dress with Urea @33kg /ha and MOP @22kg/ha. Irrigate again after 48 hours of fertilizer application. - Application of 30kg Carbofuran (3G)/ ha with first top dressing of fertilizer to protect crop from insect pest and nematodes. - Prepare main plots for ploughing.		
Rabi maize	Cob formation		- Avoid water logging by constructing proper drainage system.		
Kharif Maize	Land preparation		- Land preparation for sowing kharif maize may be done.		
Seeds storage	Post harvest management		 For seed purpose dry, clean and store the seeds in <i>RC-seed bins</i> after proper drying of seeds along with charcoal at 80:20. Check for moisture content or weight of seeds. For grains, store grains in well ventilated godowns after drying proper. Spray Malathion 1% in <i>godowns</i>. 		

Horticulture Crops

* The water logged crop field may take more than a month to drain out excess water and come up to optimum soil moisture level for cultivation, hence it will be helpful if 8-10% of the water logged area is converted into water harvesting pond which may serve to maintain continuous water supply for irrigation in future.

Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
French Bean	Vegetative		- Construct proper drainage system to avoid water logging.
Cucurbits	Vegetative		- Construct proper drainage system to avoid water logging.
Bhindi	Vegetative		- Construct proper drainage system to avoid water logging.
Chilli/ capsicum	Vegetative		In chilies and capsicum, spray Sixer (Carbendazim 12% WP + Mancozeb 63% WP) @ 2 g/ litre of water to control the fungal attack after rains. - Construct proper drainage system to avoid water logging.
Tomato/ Brinjal	Vegetative		 After rains apply 38kg Urea+ 125kg SSP+ 24kg MOP per sangam as basal dose and 25kg Urea after 25-30days after tansplanting. Construct proper drainage system to avoid water logging.
Onion/ Garlic	Bulb formation		- Construct proper drainage system to avoid water logging.
		Purple Bloch	- Apply 1kg Trichoderma viride/ sangam when there is moisture in soil and avoid excess application of Nitrogen in case of onion and garlic to avoid Purple Bloch.
	Maturity		 - Let the plants grow as such in the field. - Do not harvest/ uproot at present. - Let the mature plants dry in the sun for at least 7-10 days or more depending upon the stage.

Animal Sciences

" Provide clean drinking water for birds and animals.					
f bird/ animal	Stage	Disease and Management	Agro-meteorological advisories		
f l	bird/ animal	bird/ animal Stage	bird/ animal Stage Disease and Management		



Manipur Centre, Lamphelpat, Imphal - 795 004





Poultry (Chicken/ Turkey/ Duck)	All age groups	Ranikhet disease	At the end of winter season and starting of spring season by March, there may be outbreaks of Ranikhet Disease, hence vaccinate all birds against Ranikhet Diseases in this time. 1. F-1 Strain may be first administered within 7 days of age and second dose may be given at 30days for all birds. 2. R ₂ B vaccine of 8-9 weeks of age group birds (layers). 3. Killed ND virus vaccine of 16-18 weeks of age group birds (layers).
		Fowl Pox	Vaccinate against fowl pox.
		Deworming	➤ Use Albendazole liquid @ 20-40 ml for 100 adult birds and repeat it next day with half the dose at regular interval of 3 weeks.
	All age groups	Vaccination	- Vaccinate against Enterotoxemia and sheep pox.
Sheep/ Goat	excepts the young	Management	- Pregnant animal (more than 6 months) should be given additional feed.
Shoop, Cour	ones	Mineral feeding to protect (PICA)	- Mineral mixtures are to be supplemented.
		Deworming	New born but not yet been dewormed should be given deworming agent.
		De-worming	➤ De-worming of animals should be done using Abendazole/ Levamisole @7.5 mg/kg b.wt. or Ivermectin @50mg/kg b. wt.
Diα	All age groups	Mineral feeding	➤ Provide mineral mixture.
Pig	except the young ones	Care and management	Provide clean water (drinking). Add antibiotics in feed and water. Vaccinate against FMD.
		Mites infestation	Spray with Skin Heal Spray in sufficient quantity.
	All age groups	Fodder cultivation	➤ Maize/ Jowar/ Bajra sown as fodder crop may be harvested after 45-50 days.
Cattle	excepts the young	Ectoparasites	- Butox@ 2ml/lit of water at forth nightly interval.
	ones	Mastitis	Animals should be milked completely.
	ones	Management	- Some female animals may get agitated due to the heat especially during night time, protect and take care of it.
T7 1 1			

Fisheries

- * Encircle ponds to avoid escape of fishes.
- * New fish ponds may be dug out and old ones may be renovated/ cleaned before for large scale fish culture.
- * Care must be taken for newly rain fed ponds by liming for stocking fish fries/ fingerlings or yearlings.
- * Intensive care must be taken for fish brooders by keeping them in separate ponds. It must be provided with well balanced feed and good quality water.
- * Avoid rain water to get drain down directly into the culture pond.



Phone: 2414654, 2414260, 2414749; Fax: (0385) 2414654, 2414749

Manipur Centre, Lamphelpat, Imphal - 795 004





MANIPUR BULLETIN 21st April, 2017

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 22 nd to 26th April, 2017 as below:

Significant past weather for the preceding bi-weekly of Imphal - West (18th to 20th morning April, 2017)

management

Observed mainly clear on 18th then overcast sky on 19th & 20th and 5.5 mm rainfall was recorded during past three days. Maximum temperature range of 25.0 to 27.6 $^{\circ}$ C and minimum temperature range of 15.0 to 19.1 $^{\circ}$ C with mean relative humidity 74.7 % max and 52 % min was recorded in the past three days.

Weather forecast for next five days of Ukhrul (22nd to 26th April, 2017)

Likely to have widespread heavy rainfall at isolated places very likely upto $23^{\rm rd}$ April and partly cloudy to overcast sky with maximum temp. $24-25\ ^\circ$ C & minimum temp. 18 - $20\ ^\circ$ C. Relative humidity may reach up to $97\ \%$ (max RH) & 75 % (min RH). The average wind speed may be 2-3 km/hr.

- For grains, store grains in well ventilated godowns after drying proper. Spray

Agro-meteorological advisories

Field Crops						
* Harvest rain water. Construct proper drainage system to avoid water logging.						
* Cultural practices a	re not advised during	g rainy days.				
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories			
			- Maintain 5-8cm of water level.			
	Tillering		- Hand weeding may be done. Drain out excess water and top dress with Urea			
	(Pre-kharif rice)		@33kg /ha and MOP @22kg/ha. Irrigate again after 48 hours of fertilizer			
Diag			application.			
Rice			- Application of 30kg Carbofuran (3G)/ ha with first top dressing of fertilizer to			
			protect crop from insect pest and nematodes.			
	Land preparation		- Prepare main plots for ploughing.			
	(Main kharif rice)					
Rabi maize	Cob formation		- Avoid water logging by constructing proper drainage system.			
Kharif Maize	Land preparation		- Land preparation for sowing kharif maize may be done.			
			- For seed purpose dry, clean and store the seeds in <i>RC-seed bins</i> after proper			
	Post harvest		drying of seeds along with charcoal at 80:20. Check for moisture content or			

Horticulture Crops

Name of the animal

Name of bird/animal

* Provide clean drinking water for birds and animals.

Stage

Seeds storage

weight of seeds.

Malathion 1% in godowns.

Stage	Pest and disease	Agro-meteorological advisories
Vegetative		- Construct proper drainage system to avoid water logging.
Vegetative		- Construct proper drainage system to avoid water logging.
Vegetative		- Construct proper drainage system to avoid water logging.
Vegetative		In chilies and capsicum, spray Sixer (Carbendazim 12% WP + Mancozeb 63% WP) @ 2 g/ litre of water to control the fungal attack after rains. - Construct proper drainage system to avoid water logging.
nato/ Brinjal Vegetative		 - After rains apply 38kg Urea+ 125kg SSP+ 24kg MOP per sangam as basal dose and 25kg Urea after 25-30days after tansplanting. - Construct proper drainage system to avoid water logging.
		- Construct proper drainage system to avoid water logging.
Bulb formation	Purple Bloch	- Apply 1kg Trichoderma viride/ sangam when there is moisture in soil and avoid excess application of Nitrogen in case of onion and garlic to avoid Purple Bloch.
Maturity		 Let the plants grow as such in the field. Do not harvest/ uproot at present. Let the mature plants dry in the sun for at least 7-10 days or more depending upon the stage.
	Vegetative Vegetative Vegetative Vegetative Bulb formation	Vegetative Vegetative Vegetative Vegetative Vegetative Bulb formation Purple Bloch

Disease and

Management

^{*} The water logged crop field may take more than a month to drain out excess water and come up to optimum soil moisture level for cultivation, hence it will be helpful if 8-10% of the water logged area is converted into water harvesting pond which may serve to maintain continuous water supply for irrigation in future



Manipur Centre, Lamphelpat, Imphal - 795 004





Sheep/ Goat	Poultry (Chicken/ Turkey/ Duck)	All age groups	Ranikhet disease	At the end of winter season and starting of spring season by March, there may be outbreaks of Ranikhet Disease, hence vaccinate all birds against Ranikhet Diseases in this time. 1. F-1 Strain may be first administered within 7 days of age and second dose may be given at 30days for all birds. 2. R ₂ B vaccine of 8-9 weeks of age group birds (layers). 3. Killed ND virus vaccine of 16-18 weeks of age group birds (layers).
Sheep/ Goat			Fowl Pox	Vaccinate against fowl pox.
Pregnant animal (more than 6 months) should be given additional feed. Mineral feeding to protect (PICA) New born but not yet been dewormed should be given deworming agent. Pregnant animal (more than 6 months) should be given additional feed.			Deworming	➤ Use Albendazole liquid @ 20-40 ml for 100 adult birds and repeat it next day with half the dose at regular interval of 3 weeks.
Ones Mineral feeding to protect (PICA) Deworming New born but not yet been dewormed should be given deworming agent. De-worming De-worming of animals should be done using Abendazole/ Levamiso mg/kg b.wt. or Ivermectin @50mg/kg b. wt. Mineral feeding Provide mineral mixture. Care and Provide clean water (drinking). Add antibiotics in feed and water. Vaccinate against FMD. Mites infestation Mites infestation Mites infestation Majze/ Jowar/ Bajra sown as fodder crop may be harvested after 45-5		All age groups	Vaccination	- Vaccinate against Enterotoxemia and sheep pox.
Pig Mineral feeding to protect (PICA) Deworming New born but not yet been dewormed should be given deworming agent. De-worming of animals should be done using Abendazole/ Levamiso mg/kg b.wt. or Ivermectin @50mg/kg b. wt. Mineral feeding Provide mineral mixture. Care and Provide clean water (drinking). Add antibiotics in feed and water. Vaccinate against FMD. Mites infestation Spray with Skin Heal Spray in sufficient quantity. Fodder cultivation Maize/ Inwar/ Baira sown as fodder crop may be harvested after 45-5	Sheen/ Goat	1	Management	- Pregnant animal (more than 6 months) should be given additional feed.
Pig All age groups except the young ones All age groups except the young ones De-worming De-worming of animals should be done using Abendazole/ Levamiso mg/kg b.wt. or Ivermectin @50mg/kg b. wt. Mineral feeding Provide mineral mixture. Care and Provide clean water (drinking). Add antibiotics in feed and water. Vaccinate against FMD. Mites infestation Spray with Skin Heal Spray in sufficient quantity. Fodder cultivation Maize/ Jawar/ Baira sown as fodder crop may be harvested after 45-5	P/ Oom	ones		- Mineral mixtures are to be supplemented.
Pig All age groups except the young ones Mineral feeding Care and management Mites infestation Mites infestation Fodder cultivation Mineral feeding Provide mineral mixture. Provide clean water (drinking). Add antibiotics in feed and water. Vaccinate against FMD. Maize/ Jowar/ Baira sown as fodder crop may be harvested after 45-5			Deworming	New born but not yet been dewormed should be given deworming agent.
Prig except the young ones Care and management Provide clean water (drinking). Add antibiotics in feed and water. Vaccinate against FMD. Mites infestation Spray with Skin Heal Spray in sufficient quantity. Fodder cultivation Maize/ Jowar/ Baira sown as fodder crop may be harvested after 45-5		except the young	De-worming	
ones Care and provide clean water (drinking). Add antibiotics in feed and water. Vaccinate against FMD. Mites infestation Spray with Skin Heal Spray in sufficient quantity. Fodder cultivation Maize/ Jowar/ Baira sown as fodder crop may be harvested after 45-5	Pig		Mineral feeding	
Fodder cultivation Maize/ Jowar/ Baira sown as fodder crop may be harvested after 45-5				Add antibiotics in feed and water. Vaccinate against FMD.
Fodder cultivation Maize/ Jowar/ Baira sown as fodder crop may be harvested after 45-5			Mites infestation	
All age groups		All age groups	Fodder cultivation	➤ Maize/ Jowar/ Bajra sown as fodder crop may be harvested after 45-50 days.
excepts the young except the young except except the young except exce	Cattle			<u> </u>
ones Mastitis Animals should be milked completely.		1		
Management - Some female animals may get agitated due to the heat especially during time, protect and take care of it.		ones	Management	- Some female animals may get agitated due to the heat especially during night time, protect and take care of it.

Fisheries

- * Encircle ponds to avoid escape of fishes.
- * New fish ponds may be dug out and old ones may be renovated/ cleaned before for large scale fish culture.
- * Care must be taken for newly rain fed ponds by liming for stocking fish fries/ fingerlings or yearlings.
- * Intensive care must be taken for fish brooders by keeping them in separate ponds. It must be provided with well balanced feed and good quality water.
- * Avoid rain water to get drain down directly into the culture pond.



Manipur Centre, Lamphelpat, Imphal - 795 004





MANIPUR BULLETIN

21st April, 2017

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 22 nd to 26th April, 2017 as below:

Significant past weather for the preceding bi-weekly of Imphal - West (18th to 20th morning April, 2017)

Observed mainly clear on 18th then overcast sky on 19th & 20th and 5.5 mm rainfall was recorded during past three days. Maximum temperature range of 25.0 to 27.6 $^{\circ}$ C and minimum temperature range of 15.0 to 19.1 $^{\circ}$ C with mean relative humidity 74.7 % max and 52 % min was recorded in the past three days.

Weather forecast for next five days of Imphal East (22nd to 26th April, 2017)

Likely to have widespread heavy rainfall at isolated places very likely upto 23rd April and partly cloudy to overcast sky with maximum temp. 23 – 25 ° C & minimum temp. 18 - 20 °C. Relative humidity may reach up to 99 % (max RH) & 92 % (min RH). The average wind speed may be 0-2 km/hr.

Field Crops				
* Harvest rain water.			oid water logging.	
* Cultural practices a	are not advised during	g rainy days.		
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories	
Rice	Tillering (Pre-kharif rice) Land preparation (Main kharif rice)		- Maintain 5-8cm of water level. - Hand weeding may be done. Drain out excess water and top dress with Urea @33kg /ha and MOP @22kg/ha. Irrigate again after 48 hours of fertilizer application. - Application of 30kg Carbofuran (3G)/ ha with first top dressing of fertilizer to protect crop from insect pest and nematodes. - Prepare main plots for ploughing.	
Rabi maize	Cob formation		- Avoid water logging by constructing proper drainage system.	
Kharif Maize	Land preparation		- Land preparation for sowing kharif maize may be done.	
Seeds storage	Post harvest management		 For seed purpose dry, clean and store the seeds in <i>RC-seed bins</i> after proper drying of seeds along with charcoal at 80:20. Check for moisture content or weight of seeds. For grains, store grains in well ventilated godowns after drying proper. Spray Malathion 1% in <i>godowns</i>. 	

Horticulture Crops

* The water logged crop field may take more than a month to drain out excess water and come up to optimum soil moisture level for cultivation, hence it will be helpful if 8-10% of the water logged area is converted into water harvesting pond which may serve to maintain continuous water supply for irrigation in future.

Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
French Bean	Vegetative		- Construct proper drainage system to avoid water logging.
Cucurbits	Vegetative		- Construct proper drainage system to avoid water logging.
Bhindi	Vegetative		- Construct proper drainage system to avoid water logging.
Chilli/ capsicum	Vegetative		In chilies and capsicum, spray Sixer (Carbendazim 12% WP + Mancozeb 63% WP) @ 2 g/ litre of water to control the fungal attack after rains. - Construct proper drainage system to avoid water logging.
Tomato/ Brinjal	injal Vegetative		 After rains apply 38kg Urea+ 125kg SSP+ 24kg MOP per sangam as basal dose and 25kg Urea after 25-30days after tansplanting. Construct proper drainage system to avoid water logging.
			- Construct proper drainage system to avoid water logging.
	Bulb formation	Purple Bloch	- Apply 1kg Trichoderma viride/ sangam when there is moisture in soil and avoid excess application of Nitrogen in case of onion and garlic to avoid Purple Bloch.
Onion/ Garlic	Maturity		 Let the plants grow as such in the field. Do not harvest/ uproot at present. Let the mature plants dry in the sun for at least 7-10 days or more depending upon the stage.

Anımal Sciences

* Provide clean drinking water for birds and animals.				
Name of bird/ animal	Stage	Disease and Management	Agro-meteorological advisories	



Manipur Centre, Lamphelpat, Imphal - 795 004





Sheep/ Goat	Poultry (Chicken/ Turkey/ Duck)	All age groups	Ranikhet disease	At the end of winter season and starting of spring season by March, there may be outbreaks of Ranikhet Disease, hence vaccinate all birds against Ranikhet Diseases in this time. 1. F-1 Strain may be first administered within 7 days of age and second dose may be given at 30days for all birds. 2. R ₂ B vaccine of 8-9 weeks of age group birds (layers). 3. Killed ND virus vaccine of 16-18 weeks of age group birds (layers).
Sheep/ Goat			Fowl Pox	Vaccinate against fowl pox.
Pregnant animal (more than 6 months) should be given additional feed. Mineral feeding to protect (PICA) New born but not yet been dewormed should be given deworming agent. Pregnant animal (more than 6 months) should be given additional feed.			Deworming	➤ Use Albendazole liquid @ 20-40 ml for 100 adult birds and repeat it next day with half the dose at regular interval of 3 weeks.
Ones Mineral feeding to protect (PICA) Deworming New born but not yet been dewormed should be given deworming agent. De-worming De-worming of animals should be done using Abendazole/ Levamiso mg/kg b.wt. or Ivermectin @50mg/kg b. wt. Mineral feeding Provide mineral mixture. Care and Provide clean water (drinking). Add antibiotics in feed and water. Vaccinate against FMD. Mites infestation Mites infestation Mites infestation Majze/ Jowar/ Bajra sown as fodder crop may be harvested after 45-5		All age groups	Vaccination	- Vaccinate against Enterotoxemia and sheep pox.
Pig Mineral feeding to protect (PICA) Deworming New born but not yet been dewormed should be given deworming agent. De-worming of animals should be done using Abendazole/ Levamiso mg/kg b.wt. or Ivermectin @50mg/kg b. wt. Mineral feeding Provide mineral mixture. Care and Provide clean water (drinking). Add antibiotics in feed and water. Vaccinate against FMD. Mites infestation Spray with Skin Heal Spray in sufficient quantity. Fodder cultivation Maize/ Inwar/ Baira sown as fodder crop may be harvested after 45-5	Sheen/ Goat	1	Management	- Pregnant animal (more than 6 months) should be given additional feed.
Pig All age groups except the young ones All age groups except the young ones De-worming De-worming of animals should be done using Abendazole/ Levamiso mg/kg b.wt. or Ivermectin @50mg/kg b. wt. Mineral feeding Provide mineral mixture. Care and Provide clean water (drinking). Add antibiotics in feed and water. Vaccinate against FMD. Mites infestation Spray with Skin Heal Spray in sufficient quantity. Fodder cultivation Maize/ Jawar/ Baira sown as fodder crop may be harvested after 45-5	P/ Oom	ones		- Mineral mixtures are to be supplemented.
Pig All age groups except the young ones Mineral feeding Care and management Mites infestation Mites infestation Fodder cultivation Mineral feeding Provide mineral mixture. Provide clean water (drinking). Add antibiotics in feed and water. Vaccinate against FMD. Maize/ Jowar/ Baira sown as fodder crop may be harvested after 45-5			Deworming	New born but not yet been dewormed should be given deworming agent.
Prig except the young ones Care and management Provide clean water (drinking). Add antibiotics in feed and water. Vaccinate against FMD. Mites infestation Spray with Skin Heal Spray in sufficient quantity. Fodder cultivation Maize/ Jowar/ Baira sown as fodder crop may be harvested after 45-5		except the young	De-worming	
ones Care and provide clean water (drinking). Add antibiotics in feed and water. Vaccinate against FMD. Mites infestation Spray with Skin Heal Spray in sufficient quantity. Fodder cultivation Maize/ Jowar/ Baira sown as fodder crop may be harvested after 45-5	Pig		Mineral feeding	
Fodder cultivation Maize/ Jowar/ Baira sown as fodder crop may be harvested after 45-5				Add antibiotics in feed and water. Vaccinate against FMD.
Fodder cultivation Maize/ Jowar/ Baira sown as fodder crop may be harvested after 45-5			Mites infestation	
All age groups		All age groups	Fodder cultivation	➤ Maize/ Jowar/ Bajra sown as fodder crop may be harvested after 45-50 days.
excepts the young except the young except except the young except exce	Cattle			<u> </u>
ones Mastitis Animals should be milked completely.		1		
Management - Some female animals may get agitated due to the heat especially during time, protect and take care of it.		ones	Management	- Some female animals may get agitated due to the heat especially during night time, protect and take care of it.

Fisheries

- * Encircle ponds to avoid escape of fishes.
- * New fish ponds may be dug out and old ones may be renovated/ cleaned before for large scale fish culture.
- * Care must be taken for newly rain fed ponds by liming for stocking fish fries/ fingerlings or yearlings.
- * Intensive care must be taken for fish brooders by keeping them in separate ponds. It must be provided with well balanced feed and good quality water.
- * Avoid rain water to get drain down directly into the culture pond.



Manipur Centre, Lamphelpat, Imphal - 795 004





MANIPUR BULLETIN

21st April, 2017

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 22 nd to 26th April, 2017 as below:

Significant past weather for the preceding bi-weekly of Imphal - West (18th to 20th morning April, 2017)

Observed mainly clear on 18th then overcast sky on 19th & 20th and 5.5 mm rainfall was recorded during past three days. Maximum temperature range of 25.0 to 27.6 $^{\circ}$ C and minimum temperature range of 15.0 to 19.1 $^{\circ}$ C with mean relative humidity 74.7 % max and 52 % min was recorded in the past three days.

Weather forecast for next five days of Imphal West (22nd to 26th April, 2017)

Likely to have widespread heavy rainfall at isolated places very likely upto 23rd April and partly cloudy to overcast sky with maximum temp. 22 – 25 ° C & minimum temp. 17 - 19 °C. Relative humidity may reach up to 100 % (max RH) & 93 % (min RH). The average wind speed may be 2 km/hr.

Field Crops			
* Harvest rain water.	Construct proper dra	ninage system to avo	oid water logging.
* Cultural practices a	are not advised during	g rainy days.	
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Rice	Tillering (Pre-kharif rice) Land preparation (Main kharif rice)		 - Maintain 5-8cm of water level. - Hand weeding may be done. Drain out excess water and top dress with Urea @33kg /ha and MOP @22kg/ha. Irrigate again after 48 hours of fertilizer application. - Application of 30kg Carbofuran (3G)/ ha with first top dressing of fertilizer to protect crop from insect pest and nematodes. - Prepare main plots for ploughing.
Rabi maize	Cob formation		- Avoid water logging by constructing proper drainage system.
Kharif Maize	Land preparation		- Land preparation for sowing kharif maize may be done.
Seeds storage	Post harvest management		 For seed purpose dry, clean and store the seeds in <i>RC-seed bins</i> after proper drying of seeds along with charcoal at 80:20. Check for moisture content or weight of seeds. For grains, store grains in well ventilated godowns after drying proper. Spray Malathion 1% in <i>godowns</i>.

Horticulture Crops

* The water logged crop field may take more than a month to drain out excess water and come up to optimum soil moisture level for cultivation, hence it will be helpful if 8-10% of the water logged area is converted into water harvesting pond which may serve to maintain continuous water supply for irrigation in future.

Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
French Bean	Vegetative		- Construct proper drainage system to avoid water logging.
Cucurbits	Vegetative		- Construct proper drainage system to avoid water logging.
Bhindi	Vegetative		- Construct proper drainage system to avoid water logging.
Chilli/ capsicum	Vegetative		In chilies and capsicum, spray Sixer (Carbendazim 12% WP + Mancozeb 63% WP) @ 2 g/ litre of water to control the fungal attack after rains. - Construct proper drainage system to avoid water logging.
Tomato/ Brinjal	Vegetative		 After rains apply 38kg Urea+ 125kg SSP+ 24kg MOP per sangam as basal dose and 25kg Urea after 25-30days after tansplanting. Construct proper drainage system to avoid water logging.
			- Construct proper drainage system to avoid water logging.
Onion/ Garlic	Bulb formation	Purple Bloch	- Apply 1kg Trichoderma viride/ sangam when there is moisture in soil and avoid excess application of Nitrogen in case of onion and garlic to avoid Purple Bloch.
	Maturity		 Let the plants grow as such in the field. Do not harvest/ uproot at present. Let the mature plants dry in the sun for at least 7-10 days or more depending upon the stage.

Anımal Sciences

L	* Provide clean drinkii	ng water for birds af	ia animais.	
	Name of bird/ animal	Stage	Disease and Management	Agro-meteorological advisories



Manipur Centre, Lamphelpat, Imphal - 795 004





Sheep/ Goat	Poultry (Chicken/ Turkey/ Duck)	All age groups	Ranikhet disease	At the end of winter season and starting of spring season by March, there may be outbreaks of Ranikhet Disease, hence vaccinate all birds against Ranikhet Diseases in this time. 1. F-1 Strain may be first administered within 7 days of age and second dose may be given at 30days for all birds. 2. R ₂ B vaccine of 8-9 weeks of age group birds (layers). 3. Killed ND virus vaccine of 16-18 weeks of age group birds (layers).
Sheep/ Goat			Fowl Pox	Vaccinate against fowl pox.
Pregnant animal (more than 6 months) should be given additional feed. Mineral feeding to protect (PICA) New born but not yet been dewormed should be given deworming agent. Pregnant animal (more than 6 months) should be given additional feed.			Deworming	➤ Use Albendazole liquid @ 20-40 ml for 100 adult birds and repeat it next day with half the dose at regular interval of 3 weeks.
Ones Mineral feeding to protect (PICA) Deworming New born but not yet been dewormed should be given deworming agent. De-worming De-worming of animals should be done using Abendazole/ Levamiso mg/kg b.wt. or Ivermectin @50mg/kg b. wt. Mineral feeding Provide mineral mixture. Care and Provide clean water (drinking). Add antibiotics in feed and water. Vaccinate against FMD. Mites infestation Mites infestation Mites infestation Majze/ Jowar/ Bajra sown as fodder crop may be harvested after 45-5		All age groups	Vaccination	- Vaccinate against Enterotoxemia and sheep pox.
Pig Mineral feeding to protect (PICA) Deworming New born but not yet been dewormed should be given deworming agent. De-worming of animals should be done using Abendazole/ Levamiso mg/kg b.wt. or Ivermectin @50mg/kg b. wt. Mineral feeding Provide mineral mixture. Care and Provide clean water (drinking). Add antibiotics in feed and water. Vaccinate against FMD. Mites infestation Spray with Skin Heal Spray in sufficient quantity. Fodder cultivation Maize/ Inwar/ Baira sown as fodder crop may be harvested after 45-5	Sheen/ Goat	1	Management	- Pregnant animal (more than 6 months) should be given additional feed.
Pig All age groups except the young ones All age groups except the young ones De-worming De-worming of animals should be done using Abendazole/ Levamiso mg/kg b.wt. or Ivermectin @50mg/kg b. wt. Mineral feeding Provide mineral mixture. Care and Provide clean water (drinking). Add antibiotics in feed and water. Vaccinate against FMD. Mites infestation Spray with Skin Heal Spray in sufficient quantity. Fodder cultivation Maize/ Jawar/ Baira sown as fodder crop may be harvested after 45-5	P/ Oom	ones		- Mineral mixtures are to be supplemented.
Pig All age groups except the young ones Mineral feeding Care and management Mites infestation Mites infestation Fodder cultivation Mineral feeding Provide mineral mixture. Provide clean water (drinking). Add antibiotics in feed and water. Vaccinate against FMD. Maize/ Jowar/ Baira sown as fodder crop may be harvested after 45-5			Deworming	New born but not yet been dewormed should be given deworming agent.
Prig except the young ones Care and management Provide clean water (drinking). Add antibiotics in feed and water. Vaccinate against FMD. Mites infestation Spray with Skin Heal Spray in sufficient quantity. Fodder cultivation Maize/ Jowar/ Baira sown as fodder crop may be harvested after 45-5		except the young	De-worming	
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Fodder cultivation Maize/ Jowar/ Baira sown as fodder crop may be harvested after 45-5	Tig			Add antibiotics in feed and water. Vaccinate against FMD.
Fodder cultivation Maize/ Jowar/ Baira sown as fodder crop may be harvested after 45-5			Mites infestation	
All age groups		All age groups	Fodder cultivation	➤ Maize/ Jowar/ Bajra sown as fodder crop may be harvested after 45-50 days.
excepts the young except the young except except the young except exce	Cattle			<u> </u>
ones Mastitis Animals should be milked completely.		1		
Management - Some female animals may get agitated due to the heat especially during time, protect and take care of it.		ones	Management	- Some female animals may get agitated due to the heat especially during night time, protect and take care of it.

Fisheries

- * Encircle ponds to avoid escape of fishes.
- * New fish ponds may be dug out and old ones may be renovated/ cleaned before for large scale fish culture.
- * Care must be taken for newly rain fed ponds by liming for stocking fish fries/ fingerlings or yearlings.
- * Intensive care must be taken for fish brooders by keeping them in separate ponds. It must be provided with well balanced feed and good quality water.
- * Avoid rain water to get drain down directly into the culture pond.