

Manipur Centre, Lamphelpat, Imphal - 795 004

"Gramin Krishi Mausam Seva"



MANIPUR BULLETIN 10th **March, 2017**

Bishnupur

Field Crops

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 11th to 15th March, 2017 as below:

Significant past weather for the preceding bi-weekly of Imphal - West (7^{th} to 9^{th} March, 2017)

Observed mainly clear to partly cloudy upto 8^{th} Mar morning then mainly cloudy to cloudy sky thereafter and **1.3 mm** rainfall was recorded during past three days. Maximum temperature range of 22.7 to 25.3 $^{\circ}$ C and rise in minimum temperature range of 8.3 to 13.6 $^{\circ}$ C with mean relative humidity 80.67 % max and 39.67 % min was recorded in the past four days. The average wind speed range remained 3.2 to 6.1 km/hr.

Weather forecast for next five days of Bishnupur (11th to 15th March, 2017)

Likely to have heavy rainfall at isolated places during 11^{th} to 12^{th} March and partly cloudy to cloudy sky with maximum temp. $25-27\,^{\circ}$ C & minimum temp. $14-17\,^{\circ}$ C. Relative humidity may reach up to 99 % (max RH) & 93 % (min RH). The average wind speed may be 4-6 km/hr. Wind direction may be South Easterly to South Westerly during next five days.

*Harvest rain water for	use when required		
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Pre-Kharif rice	Nursery to transplanting	T GT and discase	 - Provisions may be done to repair or construct drainage system in and around the crop field. - Transplant the seedling at 20-25 days after sowing. - Before first ploughing of main field, apply well decomposed FYM @10-15 t/ha. After a cross plough, irrigate the field to 5-7 cm (2-3) inches depth. Submerge soil for 15-20 days before planting to obtain weed free plot. - At the time of final leveling, apply 97 kg Urea, 87Kg DAP and 45 Kg MOP per ha.
Pulses	Maturity to harvesting		- Harvest mature pods before rains and dry under shed to protect from rains.
Rabi maize	Vegetative	Stem borer	 - Construct proper drainage system. - To control the infestation of stem borer, apply few granules of Carbofuradan 3G at maize whorl.
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. After proper drying, store grains in well ventilated godowns. Spray Malathion 1% in <i>godowns</i>.
Horticulture Crops			·
* Apply life saving irrig	gation to passion fruit,	pineapple and other fro	uit crops and mulch with dry grass at the basin to conserve the soil moisture.
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Ginger & Turmeric	Land preparation		Sorting of rhizome for seed may be started for new planting. Land preparation for planting may be started.
Citrus	Nursery	Leaf Minor	- Spray Monocrotophos @ 1ml/ lit of water or Nuvan @ 0.05% or Cypermethrin @ 2 ml/ lit of water against leaf minor in nursery after rins.
French Bean	Sowing		 Spacings: for dwarf variety like Anupama (30x45 cm from seed to seed & row to row) and for pole type Local variety (Tangkhul hawai) at 60x60 cm with 2-3 seeds per hill. Apply 12-13 kg Urea, 12-15 kg SSP and 40-45 kg MOP per ha at the time of sowing.
Cucurbits	Nursery raising to land preparation for transplanting in open field		 Go for nursery rising in polybags (size: 8cm X 10cm) under low cost polyhouse. In the 50 kg mixture of garden soil, sand and FYM in the ratio 2:1:1 incorporate 2gm Captan 50W.P. One seed is sown per polybag and kept covered with polythene sheet till the seeds sprout. Light watering during morning hours may be done. Prepare land for transplanting 4-5 leave stage cucurbits seedlings in open field.
Tree bean/ Lime/ Lemon/ Khasi Mandarin/ Banana	Land preparation and collection of planting material		 - Preparation of pits or field for planting tree bean/ lime/ lemon/ khasi mandarin/ banana may be started. - Collect good quality planting material from known source.
Bhindi	Sowing		For sowing bhindi, land preparation may be done. Sowing of bhindi/ladies finger may be done at the spacing of 30cm x 45cm. Apply 20kg urea, 38kg SSP and 20kg MOP per sangam at final stage of land preparation before sowing. Recommended varieties are - Arka Anamika and Pusa Sawani



Manipur Centre, Lamphelpat, Imphal - 795 004





Chilli/ capsicum	Nursery to early		In chilies and capsicum, spray Sixer (Carbendazim 12% WP + Mancozeb 63%
•	vegetative		WP) @ 2 g/ litre of water to control the fungal attack after rains.
			- Transplant nursery after rains in raised beds.
			- Give light watering to keep soil moist during vegetative phase.
			- 25 to 30 days old tomato seedlings may be transplanted in prepared land
	Transplanting to		incorporated with well decomposed FYM at a spacing of 40-45cm x 50-60cm
	vegetative		during evening/ cloudy day. Apply Sevin dust @ $2.5 - 5.0$ g/ hill at the time of
Tomato/ Brinjal			transplanting to protect the seedlings from caterpillar/ cutworm. Bleaching
zomwo, zmijur			powder may also be applied @ 15kg/ ha to prevent bacterial wilt.
			- Apply 75:30:60 kg of NPK/ ha at the time of transplanting.
			- A light irrigation should be given just after transplanting
	Bulb formation		- During the bulb formation stage, check that the neck portion is not covered with
Onion/ Garlic	Buto formation		soil. Light hoeing and irrigation is necessary to keep soil moist during this phase.
Animal Sciences			som Eight hoeing and inigation is necessary to keep son moist during and phase.
Name of the animal			
Name of bird/ animal	Stage	Disease and	Agro-meteorological advisories
Traine of on a annual	Stage	Management	Tigit incection great autypoints
	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.
Poultry (Chicken/			1. F-1 Strain may be first administered within 7 days of age and second dose may
Turkey/ Duck)			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).
		Deworming	Use Albendazole liquid @ 20-40 ml for 100 adult birds and repeat it next
		Deworming	day with half the dose at regular interval of 3 weeks.
~	All age groups	Management	Use Butox @2ml in ltr of water and brush with the medicated water at forth night
Sheep/ Goat	excepts the young ones	Management	interval.
		Deworming	New born but not yet been dewormed should be given deworming agent.
	ones	Deworming	The world but not yet been dewormed should be given deworming agent.
		De-worming	> De-worming of animals should be done using Abendazole/ Levamisole @7.5
	All age groups		mg/kg b.wt. or Ivermectin @50mg/kg b. wt.
Pig	except the young	Care and	Provide clean water(drinking).
_	ones	management	Add antibiotics in feed and water.
			vaccinate against FMD.
		Mites infestation	Spray with Skin Heal Spray in sufficient quantity.
		Deworming	➤ Give Piperazine liquid @ 10-15ml orally once only.
	A 11		➤ If not vaccinated, give vaccine for Black Quarter now, Haemorrhagic
Cattle	All age groups	B.Q./ H.S/FMD	septicaemia, Foot & Mouth Disease, etc.
•	excepts the young	Ectoparasites	- Butox@ 2ml/lit of water at forth nightly interval.
1	ones	Mastitis	Animals should be milked completely.
1		Fodder cultivation	Fodder crops should be irrigated every 20-30 days and 20-22 days for oat
		1 odder cultivation	cultivation.
			Cuiti (ution)

SMS:

Lakliba Thangja amadi Nongmaijingda mafam kharada nong akanba nungsit akanbaga loinana chuba yai. Nong churaktaba matamda lou-u-bada sijinanaba nong ishing yoknaba sem-sabiyu. Loufamda nong ishing tungaga leisindanaba iram-nala ningthina semjinbiyu.



Manipur Centre, Lamphelpat, Imphal - 795 004





MANIPUR BULLETIN 10th March, 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 11th to 15th March, 2017 as below:

Significant past weather for the preceding bi-weekly of Imphal - West (7^{th} to 9^{th} March, 2017)

Observed mainly clear to partly cloudy upto 8^{th} Mar morning then mainly cloudy to cloudy sky thereafter and **1.3 mm** rainfall was recorded during past three days. Maximum temperature range of 22.7 to 25.3 $^{\circ}$ C and rise in minimum temperature range of 8.3 to 13.6 $^{\circ}$ C with mean relative humidity 80.67 % max and 39.67 % min was recorded in the past four days. The average wind speed range remained 3.2 to 6.1 km/hr.

Weather forecast for next five days of Chandel (11th to 15th March, 2017)

Likely to have heavy rainfall at isolated places during 11th to 12th March and partly cloudy to cloudy sky with maximum temp. 25 – 27 ° C & minimum temp. 14 - 16 ° C. Relative humidity may reach up to 99 % (max RH) & 93 % (min RH). The average wind speed may be 4-6 km/hr. Wind direction may be South Westerly to North West Westerly during next five days

Field Crops						
	*Harvest rain water for use when required.					
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories			
Pre-Kharif rice	Nursery to transplanting		 - Provisions may be done to repair or construct drainage system in and around the crop field. - Transplant the seedling at 20-25 days after sowing. - Before first ploughing of main field, apply well decomposed FYM @10-15 t/ha. After a cross plough, irrigate the field to 5-7 cm (2-3) inches depth. Submerge soil for 15-20 days before planting to obtain weed free plot. - At the time of final leveling, apply 97 kg Urea, 87Kg DAP and 45 Kg MOP per ha. 			
Pulses	Maturity to harvesting		- Harvest mature pods before rains and dry under shed to protect from rains.			
Rabi maize	Vegetative	Stem borer	 - Construct proper drainage system. - To control the infestation of stem borer, apply few granules of Carbofuradan 3G at maize whorl. 			
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. After proper drying, store grains in well ventilated godowns. Spray Malathion 1% in <i>godowns</i>. 			
Horticulture Crops			· -			
* Apply life saving irrig	gation to passion fruit,	pineapple and other fro	uit crops and mulch with dry grass at the basin to conserve the soil moisture.			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories			
Ginger & Turmeric	Land preparation		Sorting of rhizome for seed may be started for new planting. Land preparation for planting may be started.			
Citrus	Nursery	Leaf Minor	- Spray Monocrotophos @ 1ml/ lit of water or Nuvan @ 0.05% or Cypermethrin @ 2 ml/ lit of water against leaf minor in nursery after rins.			
French Bean	Sowing		 Spacings: for dwarf variety like Anupama (30x45 cm from seed to seed & row to row) and for pole type Local variety (Tangkhul hawai) at 60x60 cm with 2-3 seeds per hill. Apply 12-13 kg Urea, 12-15 kg SSP and 40-45 kg MOP per ha at the time of sowing. 			
Cucurbits	Nursery raising to land preparation for transplanting in open field		 Go for nursery rising in polybags (size: 8cm X 10cm) under low cost polyhouse. In the 50 kg mixture of garden soil, sand and FYM in the ratio 2:1:1 incorporate 2gm Captan 50W.P. One seed is sown per polybag and kept covered with polythene sheet till the seeds sprout. Light watering during morning hours may be done. Prepare land for transplanting 4-5 leave stage cucurbits seedlings in open field. 			
Tree bean/ Lime/ Lemon/ Khasi Mandarin/ Banana	Land preparation and collection of planting material		 - Preparation of pits or field for planting tree bean/ lime/ lemon/ khasi mandarin/ banana may be started. - Collect good quality planting material from known source. 			
Bhindi	Sowing		For sowing bhindi, land preparation may be done. Sowing of bhindi/ladies finger may be done at the spacing of 30cm x 45cm. Apply 20kg urea, 38kg SSP and 20kg MOP per sangam at final stage of land preparation before sowing. Recommended varieties are - Arka Anamika and Pusa Sawani			



Manipur Centre, Lamphelpat, Imphal - 795 004





Chilli/ capsicum	Nursery to early		In chilies and capsicum, spray Sixer (Carbendazim 12% WP + Mancozeb 63%
	vegetative		WP) @ 2 g/ litre of water to control the fungal attack after rains.
			- Transplant nursery after rains in raised beds.
			- Give light watering to keep soil moist during vegetative phase.
			- 25 to 30 days old tomato seedlings may be transplanted in prepared land
	Transplanting to		incorporated with well decomposed FYM at a spacing of 40-45cm x 50-60cm
	vegetative		during evening/ cloudy day. Apply Sevin dust @ $2.5 - 5.0$ g/ hill at the time of
Tomato/ Brinjal			transplanting to protect the seedlings from caterpillar/ cutworm. Bleaching
			powder may also be applied @ 15kg/ ha to prevent bacterial wilt.
			- Apply 75:30:60 kg of NPK/ ha at the time of transplanting.
			- A light irrigation should be given just after transplanting
Onion/ Garlic	Bulb formation		- During the bulb formation stage, check that the neck portion is not covered with
			soil. Light hoeing and irrigation is necessary to keep soil moist during this phase.
Animal Sciences			
Name of the animal			
Name of bird/ animal	Stage	Disease and	Agro-meteorological advisories
		Management	
	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
Doubles (Chieles)			Diseases in this time.
Poultry (Chicken/			1. F-1 Strain may be first administered within 7 days of age and second dose may
Turkey/ Duck)			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).
		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.
Sheep/ Goat	All age groups excepts the young	Management	Use Butox @2ml in ltr of water and brush with the medicated water at forth night
Sheep/ Goat			interval.
	ones	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
	All age groups		mg/kg b.wt. or Ivermectin @50mg/kg b. wt.
Pig	except the young	Care and	Provide clean water(drinking).
	ones	management	Add antibiotics in feed and water.
			vaccinate against FMD.
		Mites infestation	> Spray with Skin Heal Spray in sufficient quantity.
		Deworming	➤ Give Piperazine liquid @ 10-15ml orally once only.
	A 11	Ŭ	> If not vaccinated, give vaccine for Black Quarter now, Haemorrhagic
Cattle	All age groups	B.Q./ H.S/FMD	septicaemia, Foot & Mouth Disease, etc.
-	excepts the young	Ectoparasites	- Butox@ 2ml/lit of water at forth nightly interval.
	ones	Mastitis	Animals should be milked completely.
		Fodder cultivation	Fodder crops should be irrigated every 20-30 days and 20-22 days for oat
		1 odder cartivation	cultivation.
	1	i	Cutu (utoti.

SMS:

Lakliba Thangja amadi Nongmaijingda mafam kharada nong akanba nungsit akanbaga loinana chuba yai. Nong churaktaba matamda lou-u-bada sijinanaba nong ishing yoknaba sem-sabiyu. Loufamda nong ishing tungaga leisindanaba iram-nala ningthina semjinbiyu.



Field Crops

ICAR Research Complex for N.E.H. Region

Manipur Centre, Lamphelpat, Imphal - 795 004

"Gramin Krishi Mausam Seva"



MANIPUR BULLETIN 10th March, 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 11th to 15th March, 2017 as below:

Significant past weather for the preceding bi-weekly of Imphal - West (7^{th} to 9^{th} March, 2017)

Observed mainly clear to partly cloudy upto 8^{th} Mar morning then mainly cloudy to cloudy sky thereafter and **1.3 mm** rainfall was recorded during past three days. Maximum temperature range of 22.7 to 25.3 $^{\circ}$ C and rise in minimum temperature range of 8.3 to 13.6 $^{\circ}$ C with mean relative humidity 80.67 % max and 39.67 % min was recorded in the past four days. The average wind speed range remained 3.2 to 6.1 km/hr.

Weather forecast for next five days of Churachandpur $(11^{th}$ to 15^{th} March, 2017)

Likely to have heavy rainfall at isolated places during 11^{th} to 12^{th} March and partly cloudy to cloudy sky with maximum temp. $25-27\,^{\circ}$ C & minimum temp. $14-16\,^{\circ}$ C. Relative humidity may reach up to 99 % (max RH) & 92 % (min RH). The average wind speed may be 4-6 km/hr. Wind direction may be South South-Easterly to Southerly during next five days.

*Harvest rain water for	r use when required.		
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Pre-Kharif rice	Nursery to transplanting		 - Provisions may be done to repair or construct drainage system in and around the crop field. - Transplant the seedling at 20-25 days after sowing. - Before first ploughing of main field, apply well decomposed FYM @10-15 t/ha. After a cross plough, irrigate the field to 5-7 cm (2-3) inches depth. Submerge soil for 15-20 days before planting to obtain weed free plot. - At the time of final leveling, apply 97 kg Urea, 87Kg DAP and 45 Kg MOP per ha.
Pulses	Maturity to harvesting		- Harvest mature pods before rains and dry under shed to protect from rains.
			- Construct proper drainage system.
Rabi maize	Vegetative	Stem borer	- To control the infestation of stem borer, apply few granules of Carbofuradan 3G at maize whorl.
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. After proper drying, store grains in well ventilated godowns. Spray Malathion 1% in <i>godowns</i>.
Horticulture Crops	•		•
* Apply life saving irri	gation to passion fruit,	pineapple and other from	uit crops and mulch with dry grass at the basin to conserve the soil moisture.
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Ginger & Turmeric	Land preparation		Sorting of rhizome for seed may be started for new planting. Land preparation for planting may be started.
Citrus	Nursery	Leaf Minor	- Spray Monocrotophos @ 1ml/ lit of water or Nuvan @ 0.05% or Cypermethrin @ 2 ml/ lit of water against leaf minor in nursery after rins.
French Bean	Sowing		- Spacings: for dwarf variety like Anupama (30x45 cm from seed to seed & row to row) and for pole type Local variety (Tangkhul hawai) at 60x60 cm with 2-3 seeds per hill. - Apply 12-13 kg Urea, 12-15 kg SSP and 40-45 kg MOP per ha at the time of sowing.
Cucurbits	Nursery raising to land preparation for transplanting in open field		 Go for nursery rising in polybags (size: 8cm X 10cm) under low cost polyhouse. In the 50 kg mixture of garden soil, sand and FYM in the ratio 2:1:1 incorporate 2gm Captan 50W.P. One seed is sown per polybag and kept covered with polythene sheet till the seeds sprout. Light watering during morning hours may be done. Prepare land for transplanting 4-5 leave stage cucurbits seedlings in open field.
Tree bean/ Lime/ Lemon/ Khasi	Land preparation and collection of planting material		 - Preparation of pits or field for planting tree bean/ lime/ lemon/ khasi mandarin/ banana may be started. - Collect good quality planting material from known source.
Mandarin/ Banana Bhindi	Sowing		For sowing bhindi, land preparation may be done. Sowing of bhindi/ladies finger may be done at the spacing of 30cm x 45cm. Apply 20kg urea, 38kg SSP and 20kg MOP per sangam at final stage of land preparation before sowing. Recommended varieties are - Arka Anamika and Pusa Sawani



Manipur Centre, Lamphelpat, Imphal - 795 004





Chilli/ capsicum	Nursery to early		In chilies and capsicum, spray Sixer (Carbendazim 12% WP + Mancozeb 63%
	vegetative		WP) @ 2 g/ litre of water to control the fungal attack after rains.
			- Transplant nursery after rains in raised beds.
			- Give light watering to keep soil moist during vegetative phase.
			- 25 to 30 days old tomato seedlings may be transplanted in prepared land
	Transplanting to		incorporated with well decomposed FYM at a spacing of 40-45cm x 50-60cm
	vegetative		during evening/ cloudy day. Apply Sevin dust @ 2.5 – 5.0 g/ hill at the time of
Tomato/ Brinjal			transplanting to protect the seedlings from caterpillar/ cutworm. Bleaching
			powder may also be applied @ 15kg/ ha to prevent bacterial wilt.
			- Apply 75:30:60 kg of NPK/ ha at the time of transplanting.
			- A light irrigation should be given just after transplanting
Onion/ Garlic	Bulb formation		- During the bulb formation stage, check that the neck portion is not covered with
			soil. Light hoeing and irrigation is necessary to keep soil moist during this phase.
Animal Sciences			
Name of the animal			
Name of bird/ animal	Stage	Disease and	Agro-meteorological advisories
		Management	
	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
Poultry (Chicken/			Diseases in this time.
Turkey/ Duck)			1. F-1 Strain may be first administered within 7 days of age and second dose may
Turkey/ Duck)			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).
		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.
Sheep/ Goat	All age groups excepts the young	Management	Use Butox @2ml in ltr of water and brush with the medicated water at forth night
Sheep/ Goat			interval.
	ones	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
	All age groups		mg/kg b.wt. or Ivermectin @50mg/kg b. wt.
Pig	except the young	Care and	Provide clean water(drinking).
	ones	management	Add antibiotics in feed and water.
			vaccinate against FMD.
		Mites infestation	Spray with Skin Heal Spray in sufficient quantity.
		Deworming	➤ Give Piperazine liquid @ 10-15ml orally once only.
	All age groups		➤ If not vaccinated, give vaccine for Black Quarter now, Haemorrhagic
Cattle	excepts the young	B.Q./ H.S/FMD	septicaemia, Foot & Mouth Disease, etc.
		Ectoparasites	- Butox@ 2ml/lit of water at forth nightly interval.
	ones	Mastitis	Animals should be milked completely.
		Fodder cultivation	Fodder crops should be irrigated every 20-30 days and 20-22 days for oat
			cultivation.

SMS:

Lakliba Thangja amadi Nongmaijingda mafam kharada nong akanba nungsit akanbaga loinana chuba yai. Nong churaktaba matamda lou-u-bada sijinanaba nong ishing yoknaba sem-sabiyu. Loufamda nong ishing tungaga leisindanaba iram-nala ningthina semjinbiyu.



Manipur Centre, Lamphelpat, Imphal - 795 004





MANIPUR BULLETIN 10th March, 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 11th to 15th March. 2017 as below:

Significant past weather for the preceding bi-weekly of Imphal - West (7^{th} to 9^{th} March, 2017)

Observed mainly clear to partly cloudy upto 8^{th} Mar morning then mainly cloudy to cloudy sky thereafter and **1.3 mm** rainfall was recorded during past three days. Maximum temperature range of 22.7 to 25.3 $^{\circ}$ C and rise in minimum temperature range of 8.3 to 13.6 $^{\circ}$ C with mean relative humidity 80.67 % max and 39.67 % min was recorded in the past four days. The average wind speed range remained 3.2 to 6.1 km/hr.

Weather forecast for next five days of Senapati (11th to 15th March, 2017)

Likely to have heavy rainfall at isolated places during 11^{th} to 12^{th} March and partly cloudy to cloudy sky with maximum temp. $24-26\,^{\circ}$ C & minimum temp. $12-14\,^{\circ}$ C. Relative humidity may reach up to 99 % (max RH) & 89 % (min RH). The average wind speed may be 2-5 km/hr. Wind direction may be North East-Easterly to South West Westerly during next five days

Field Crops			
*Harvest rain water for			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Pre-Kharif rice	Nursery to transplanting		 - Provisions may be done to repair or construct drainage system in and around the crop field. - Transplant the seedling at 20-25 days after sowing. - Before first ploughing of main field, apply well decomposed FYM @10-15 t/ha. After a cross plough, irrigate the field to 5-7 cm (2-3) inches depth. Submerge soil for 15-20 days before planting to obtain weed free plot. - At the time of final leveling, apply 97 kg Urea, 87Kg DAP and 45 Kg MOP per ha.
Pulses	Maturity to harvesting		- Harvest mature pods before rains and dry under shed to protect from rains.
			- Construct proper drainage system.
Rabi maize	Vegetative	Stem borer	- To control the infestation of stem borer, apply few granules of Carbofuradan 3G at maize whorl.
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. After proper drying, store grains in well ventilated godowns. Spray Malathion 1% in <i>godowns</i>.
Horticulture Crops			
* Apply life saving irrig	gation to passion fruit,	pineapple and other fr	uit crops and mulch with dry grass at the basin to conserve the soil moisture.
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Ginger & Turmeric	Land preparation		Sorting of rhizome for seed may be started for new planting. Land preparation for planting may be started.
Citrus	Nursery	Leaf Minor	- Spray Monocrotophos @ 1ml/ lit of water or Nuvan @ 0.05% or Cypermethrin @ 2 ml/ lit of water against leaf minor in nursery after rins.
French Bean	Sowing		 Spacings: for dwarf variety like Anupama (30x45 cm from seed to seed & row to row) and for pole type Local variety (Tangkhul hawai) at 60x60 cm with 2-3 seeds per hill. Apply 12-13 kg Urea, 12-15 kg SSP and 40-45 kg MOP per ha at the time of sowing.
Cucurbits	Nursery raising to land preparation for transplanting in open field		 Go for nursery rising in polybags (size: 8cm X 10cm) under low cost polyhouse. In the 50 kg mixture of garden soil, sand and FYM in the ratio 2:1:1 incorporate 2gm Captan 50W.P. One seed is sown per polybag and kept covered with polythene sheet till the seeds sprout. Light watering during morning hours may be done. Prepare land for transplanting 4-5 leave stage cucurbits seedlings in open field.
Tree bean/ Lime/ Lemon/ Khasi Mandarin/ Banana	Land preparation and collection of planting material		 - Preparation of pits or field for planting tree bean/ lime/ lemon/ khasi mandarin/ banana may be started. - Collect good quality planting material from known source.
Bhindi	Sowing		For sowing bhindi, land preparation may be done. Sowing of bhindi/ladies finger may be done at the spacing of 30cm x 45cm. Apply 20kg urea, 38kg SSP and 20kg MOP per sangam at final stage of land preparation before sowing. Recommended varieties are - Arka Anamika and Pusa Sawani



Manipur Centre, Lamphelpat, Imphal - 795 004





Chilli/ capsicum	Nursery to early		In chilies and capsicum, spray Sixer (Carbendazim 12% WP + Mancozeb 63%
•	vegetative		WP) @ 2 g/ litre of water to control the fungal attack after rains.
			- Transplant nursery after rains in raised beds.
			- Give light watering to keep soil moist during vegetative phase.
			- 25 to 30 days old tomato seedlings may be transplanted in prepared land
	Transplanting to		incorporated with well decomposed FYM at a spacing of 40-45cm x 50-60cm
	vegetative		during evening/ cloudy day. Apply Sevin dust @ $2.5 - 5.0$ g/ hill at the time of
Tomato/ Brinjal			transplanting to protect the seedlings from caterpillar/ cutworm. Bleaching
zomwo, zringur			powder may also be applied @ 15kg/ ha to prevent bacterial wilt.
			- Apply 75:30:60 kg of NPK/ ha at the time of transplanting.
			- A light irrigation should be given just after transplanting
0: /0 !:	Bulb formation		- During the bulb formation stage, check that the neck portion is not covered with
Onion/ Garlic			soil. Light hoeing and irrigation is necessary to keep soil moist during this phase.
Animal Sciences			
Name of the animal			
Name of bird/ animal	Stage	Disease and	Agro-meteorological advisories
		Management	
	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
Poultry (Chicken/			Diseases in this time.
Turkey/ Duck)			1. F-1 Strain may be first administered within 7 days of age and second dose may
Turkey/ Duck)			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).
		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.
Sheep/ Goat	All age groups	Management	Use Butox @2ml in ltr of water and brush with the medicated water at forth night
Sheep/ Goat	excepts the young		interval.
	ones	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
	All age groups	DC-worming	mg/kg b.wt. or Ivermectin @50mg/kg b. wt.
Pig	except the young	Care and	Provide clean water(drinking).
1 ig	ones	management	Add antibiotics in feed and water.
	ones	management	vaccinate against FMD.
		Mites infestation	 Spray with Skin Heal Spray in sufficient quantity.
		Deworming	 Spray with Skin Hear Spray in sufficient quantity. Give Piperazine liquid @ 10-15ml orally once only.
		2011011111115	 If not vaccinated, give vaccine for Black Quarter now, Haemorrhagic
Cattle	All age groups	B.Q./ H.S/FMD	septicaemia, Foot & Mouth Disease, etc.
Catal	excepts the young	Ectoparasites	- Butox@ 2ml/lit of water at forth nightly interval.
	ones	Mastitis	Animals should be milked completely.
		Fodder cultivation	
		rodder cultivation	Fodder crops should be irrigated every 20-30 days and 20-22 days for oat
	1	1	cultivation.

SMS:

Lakliba Thangja amadi Nongmaijingda mafam kharada nong akanba nungsit akanbaga loinana chuba yai. Nong churaktaba matamda lou-u-bada sijinanaba nong ishing yoknaba sem-sabiyu. Loufamda nong ishing tungaga leisindanaba iram-nala ningthina semjinbiyu.



Manipur Centre, Lamphelpat, Imphal - 795 004





MANIPUR BULLETIN 10th March, 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 11th to 15th March, 2017 as below:

Significant past weather for the preceding bi-weekly of Imphal - West (7^{th} to 9^{th} March, 2017)

Observed mainly clear to partly cloudy upto 8th Mar morning then mainly cloudy to cloudy sky thereafter and **1.3 mm** rainfall was recorded during past three days. Maximum temperature range of 22.7 to 25.3 °C and rise in minimum temperature range of 8.3 to 13.6 °C with mean relative humidity 80.67 % max and 39.67 % min was recorded in the past four days. The average wind speed range remained 3.2 to 6.1 km/hr.

Weather forecast for next five days of Tamenglong (11th to 15th March, 2017)

Likely to have heavy rainfall at isolated places during 11^{th} to 12^{th} March and partly cloudy to cloudy sky with maximum temp. $24-26\,^{\circ}$ C & minimum temp. $12-16\,^{\circ}$ C. Relative humidity may reach up to $100\,\%$ (max RH) & 90 % (min RH). The average wind speed may be 3-5 km/hr. Wind direction may be North East-Easterly to South South-Easterly during next five days

	use when required.		
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Pre-Kharif rice	Nursery to transplanting		 - Provisions may be done to repair or construct drainage system in and around the crop field. - Transplant the seedling at 20-25 days after sowing. - Before first ploughing of main field, apply well decomposed FYM @10-15 t/ha. After a cross plough, irrigate the field to 5-7 cm (2-3) inches depth. Submerge soil for 15-20 days before planting to obtain weed free plot. - At the time of final leveling, apply 97 kg Urea, 87Kg DAP and 45 Kg MOP per ha.
Pulses	Maturity to harvesting		- Harvest mature pods before rains and dry under shed to protect from rains.
Rabi maize	Vegetative	Stem borer	 Construct proper drainage system. To control the infestation of stem borer, apply few granules of Carbofuradar 3G at maize whorl.
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. After proper drying, store grains in well ventilated godowns. Spray Malathior 1% in <i>godowns</i>.
Horticulture Crops			
	gation to passion fruit,		uit crops and mulch with dry grass at the basin to conserve the soil moisture.
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Ginger & Turmeric	Land preparation		Sorting of rhizome for seed may be started for new planting. Land preparation for planting may be started.
Citrus	Nursery	Leaf Minor	- Spray Monocrotophos @ 1ml/ lit of water or Nuvan @ 0.05% or Cypermethrin @ 2 ml/ lit of water against leaf minor in nursery after rins.
French Bean	Sowing		 Spacings: for dwarf variety like Anupama (30x45 cm from seed to seed & row to row) and for pole type Local variety (Tangkhul hawai) at 60x60 cm with 2-3 seeds per hill. Apply 12-13 kg Urea, 12-15 kg SSP and 40-45 kg MOP per ha at the time of sowing.
Cucurbits	Nursery raising to land preparation for transplanting in open field		 Go for nursery rising in polybags (size: 8cm X 10cm) under low cost polyhouse. In the 50 kg mixture of garden soil, sand and FYM in the ratio 2:1:1 incorporate 2gm Captan 50W.P. One seed is sown per polybag and kept covered with polythene sheet till the seeds sprout. Light watering during morning hours may be done. Prepare land for transplanting 4-5 leave stage cucurbits seedlings in open field.
Tree bean/ Lime/ Lemon/ Khasi Mandarin/ Banana	Land preparation and collection of planting material		Preparation of pits or field for planting tree bean/ lime/ lemon/ khasi mandarin/ banana may be started. Collect good quality planting material from known source.
Bhindi	Sowing		For sowing bhindi, land preparation may be done. Sowing of bhindi/ladies finger may be done at the spacing of 30cm x 45cm. Apply 20kg urea, 38kg SSP and 20kg MOP per sangam at final stage of land preparation before sowing. Recommended varieties are - Arka Anamika and Pusa Sawani



Manipur Centre, Lamphelpat, Imphal - 795 004





Chilli/ capsicum	Nursery to early 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. - Transplant nursery after rains in raised beds. - Give light watering to keep soil moist during vegetative phase.
Tomato/ Brinjal	Transplanting to vegetative		- 25 to 30 days old tomato seedlings may be transplanted in prepared land incorporated with well decomposed FYM at a spacing of 40-45cm x 50-60cm during evening/ cloudy day. Apply Sevin dust @ 2.5 – 5.0 g/ hill at the time of transplanting to protect the seedlings from caterpillar/ cutworm. Bleaching powder may also be applied @ 15kg/ ha to prevent bacterial wilt. - Apply 75:30:60 kg of NPK/ ha at the time of transplanting. - A light irrigation should be given just after transplanting
Onion/ Garlic	Bulb formation		- During the bulb formation stage, check that the neck portion is not covered with soil. Light hoeing and irrigation is necessary to keep soil moist during this phase.
Animal Sciences	1	•	
Name of the animal			
Name of bird/ animal	Stage	Disease and Management	Agro-meteorological advisories
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).
		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.
Sheep/ Goat	All age groups excepts the young	Management	Use Butox @2ml in ltr of water and brush with the medicated water at forth night interval.
	ones	Deworming	New born but not yet been dewormed should be given deworming agent.
	All age groups	De-worming	De-worming of animals should be done using Abendazole/ Levamisole @7.5 mg/kg b.wt. or Ivermectin @50mg/kg b. wt.
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.
		Deworming	➤ Give Piperazine liquid @ 10-15ml orally once only.
Cattle	All age groups	B.Q./ H.S/FMD	➤ If not vaccinated, give vaccine for Black Quarter now, Haemorrhagic septicaemia, Foot & Mouth Disease, etc.
	excepts the young ones	Ectoparasites	- Butox@ 2ml/lit of water at forth nightly interval.
	Ones	Mastitis	Animals should be milked completely.
		Fodder cultivation	Fodder crops should be irrigated every 20-30 days and 20-22 days for oat cultivation.

SMS:

Lakliba Thangja amadi Nongmaijingda mafam kharada nong akanba nungsit akanbaga loinana chuba yai. Nong churaktaba matamda lou-u-bada sijinanaba nong ishing yoknaba sem-sabiyu. Loufamda nong ishing tungaga leisindanaba iram-nala ningthina semjinbiyu.



Manipur Centre, Lamphelpat, Imphal - 795 004





MANIPUR BULLETIN 10th **March, 2017**

Thoubal

Field Crops

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 11th to 15th March, 2017 as below:

Significant past weather for the preceding bi-weekly of Imphal - West (7^{th} to 9^{th} March, 2017)

Observed mainly clear to partly cloudy upto 8^{th} Mar morning then mainly cloudy to cloudy sky thereafter and **1.3 mm** rainfall was recorded during past three days. Maximum temperature range of 22.7 to 25.3 °C and rise in minimum temperature range of 8.3 to 13.6 °C with mean relative humidity 80.67 % max and 39.67 % min was recorded in the past four days. The average wind speed range remained 3.2 to 6.1 km/hr.

Weather forecast for next five days of Thoubal (11th to 15th March, 2017)

Likely to have heavy rainfall at isolated places during 11^{th} to 12^{th} March and partly cloudy to cloudy sky with maximum temp. $24-26\,^{\circ}$ C & minimum temp. $12-14\,^{\circ}$ C. Relative humidity may reach up to 99 % (max RH) & 94 % (min RH). The average wind speed may be 4-6 km/hr. Wind direction may be South South-Easterly to Westerly during next five days.

*Harvest rain water for	use when required		
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Pre-Kharif rice	Nursery to transplanting	T est and disease	 - Provisions may be done to repair or construct drainage system in and around the crop field. - Transplant the seedling at 20-25 days after sowing. - Before first ploughing of main field, apply well decomposed FYM @10-15 t/ha. After a cross plough, irrigate the field to 5-7 cm (2-3) inches depth. Submerge soil for 15-20 days before planting to obtain weed free plot. - At the time of final leveling, apply 97 kg Urea, 87Kg DAP and 45 Kg MOP per ha.
Pulses	Maturity to harvesting		- Harvest mature pods before rains and dry under shed to protect from rains.
Rabi maize	Vegetative	Stem borer	 - Construct proper drainage system. - To control the infestation of stem borer, apply few granules of Carbofuradan 3G at maize whorl.
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. After proper drying, store grains in well ventilated godowns. Spray Malathion 1% in <i>godowns</i>.
Horticulture Crops			·
* Apply life saving irrig	gation to passion fruit,	pineapple and other fro	uit crops and mulch with dry grass at the basin to conserve the soil moisture.
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Ginger & Turmeric	Land preparation		Sorting of rhizome for seed may be started for new planting. Land preparation for planting may be started.
Citrus	Nursery	Leaf Minor	- Spray Monocrotophos @ 1ml/ lit of water or Nuvan @ 0.05% or Cypermethrin @ 2 ml/ lit of water against leaf minor in nursery after rins.
French Bean	Sowing		 Spacings: for dwarf variety like Anupama (30x45 cm from seed to seed & row to row) and for pole type Local variety (Tangkhul hawai) at 60x60 cm with 2-3 seeds per hill. Apply 12-13 kg Urea, 12-15 kg SSP and 40-45 kg MOP per ha at the time of sowing.
Cucurbits	Nursery raising to land preparation for transplanting in open field		 Go for nursery rising in polybags (size: 8cm X 10cm) under low cost polyhouse. In the 50 kg mixture of garden soil, sand and FYM in the ratio 2:1:1 incorporate 2gm Captan 50W.P. One seed is sown per polybag and kept covered with polythene sheet till the seeds sprout. Light watering during morning hours may be done. Prepare land for transplanting 4-5 leave stage cucurbits seedlings in open field.
Tree bean/ Lime/ Lemon/ Khasi Mandarin/ Banana	Land preparation and collection of planting material		 - Preparation of pits or field for planting tree bean/ lime/ lemon/ khasi mandarin/ banana may be started. - Collect good quality planting material from known source.
Bhindi	Sowing		For sowing bhindi, land preparation may be done. Sowing of bhindi/ladies finger may be done at the spacing of 30cm x 45cm. Apply 20kg urea, 38kg SSP and 20kg MOP per sangam at final stage of land preparation before sowing. Recommended varieties are - Arka Anamika and Pusa Sawani



Manipur Centre, Lamphelpat, Imphal - 795 004





Chilli/ capsicum	Nursery to early		In chilies and capsicum, spray Sixer (Carbendazim 12% WP + Mancozeb 63%
•	vegetative		WP) @ 2 g/ litre of water to control the fungal attack after rains.
			- Transplant nursery after rains in raised beds.
			- Give light watering to keep soil moist during vegetative phase.
			- 25 to 30 days old tomato seedlings may be transplanted in prepared land
	Transplanting to		incorporated with well decomposed FYM at a spacing of 40-45cm x 50-60cm
	vegetative		during evening/ cloudy day. Apply Sevin dust @ 2.5 – 5.0 g/ hill at the time of
Tomato/ Brinjal			transplanting to protect the seedlings from caterpillar/ cutworm. Bleaching
			powder may also be applied @ 15kg/ ha to prevent bacterial wilt.
			- Apply 75:30:60 kg of NPK/ ha at the time of transplanting.
			- A light irrigation should be given just after transplanting
Onion/ Garlic	Bulb formation		- During the bulb formation stage, check that the neck portion is not covered with
			soil. Light hoeing and irrigation is necessary to keep soil moist during this phase.
Animal Sciences			
Name of the animal			
Name of bird/ animal	Stage	Disease and	Agro-meteorological advisories
		Management	
	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
Poultry (Chicken/			Diseases in this time.
Turkey/ Duck)			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).
		ъ .	3. Killed ND virus vaccine of 16-18 weeks of age group birds (layers).
		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	Management	Use Butox @2ml in ltr of water and brush with the medicated water at forth night
Sheep/ Goat	excepts the young	Management	interval.
		Deworming	New born but not yet been dewormed should be given deworming agent.
	ones	Deworming	New both but not yet been dewormed should be given deworming agent.
		De-worming	➤ De-worming of animals should be done using Abendazole/ Levamisole @7.5
	All age groups		mg/kg b.wt. or Ivermectin @50mg/kg b. wt.
Pig	except the young	Care and	Provide clean water(drinking).
	ones	management	Add antibiotics in feed and water.
			vaccinate against FMD.
		Mites infestation	Spray with Skin Heal Spray in sufficient quantity.
		Deworming	➤ Give Piperazine liquid @ 10-15ml orally once only.
	All age groups		➤ If not vaccinated, give vaccine for Black Quarter now, Haemorrhagic
Cattle	excepts the young	B.Q./ H.S/FMD	septicaemia, Foot & Mouth Disease, etc.
	ones	Ectoparasites	- Butox@ 2ml/lit of water at forth nightly interval.
	Ones	Mastitis	Animals should be milked completely.
		Fodder cultivation	Fodder crops should be irrigated every 20-30 days and 20-22 days for oat
			cultivation.

SMS:

Lakliba Thangja amadi Nongmaijingda mafam kharada nong akanba nungsit akanbaga loinana chuba yai. Nong churaktaba matamda lou-u-bada sijinanaba nong ishing yoknaba sem-sabiyu. Loufamda nong ishing tungaga leisindanaba iram-nala ningthina semjinbiyu.



Manipur Centre, Lamphelpat, Imphal - 795 004





MANIPUR BULLETIN 10th **March**, **2017**

Ukhrul

Field Crops

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 11th to 15th March, 2017 as below:

Significant past weather for the preceding bi-weekly of Imphal - West (7^{th} to 9^{th} March, 2017)

Observed mainly clear to partly cloudy upto 8^{th} Mar morning then mainly cloudy to cloudy sky thereafter and **1.3 mm** rainfall was recorded during past three days. Maximum temperature range of 22.7 to 25.3 °C and rise in minimum temperature range of 8.3 to 13.6 °C with mean relative humidity 80.67 % max and 39.67 % min was recorded in the past four days. The average wind speed range remained 3.2 to 6.1 km/hr.

Weather forecast for next five days of Ukhrul (11th to 15th March, 2017)

Likely to have heavy rainfall at isolated places during 11^{th} to 12^{th} March and partly cloudy to cloudy sky with maximum temp. $24-26\,^{\circ}$ C & minimum temp. $12-15\,^{\circ}$ C. Relative humidity may reach up to 99 % (max RH) & 88 % (min RH). The average wind speed may be 2-5 km/hr. Wind direction may be Southerly to North-Westerly during next five days.

*Harvest rain water for	use when required.		
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Pre-Kharif rice	Nursery to transplanting		 - Provisions may be done to repair or construct drainage system in and around the crop field. - Transplant the seedling at 20-25 days after sowing. - Before first ploughing of main field, apply well decomposed FYM @ 10-15 t/ha. After a cross plough, irrigate the field to 5-7 cm (2-3) inches depth. Submerge soil for 15-20 days before planting to obtain weed free plot. - At the time of final leveling, apply 97 kg Urea, 87Kg DAP and 45 Kg MOP per ha.
Pulses	Maturity to harvesting		- Harvest mature pods before rains and dry under shed to protect from rains.
Rabi maize	Vegetative	Stem borer	 Construct proper drainage system. To control the infestation of stem borer, apply few granules of Carbofuradan 3G at maize whorl.
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. After proper drying, store grains in well ventilated godowns. Spray Malathion 1% in <i>godowns</i>.
Horticulture Crops	-	•	
* Apply life saving irrig	gation to passion fruit,	pineapple and other fro	uit crops and mulch with dry grass at the basin to conserve the soil moisture.
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Ginger & Turmeric	Land preparation		Sorting of rhizome for seed may be started for new planting. Land preparation for planting may be started.
Citrus	Nursery	Leaf Minor	- Spray Monocrotophos @ 1ml/ lit of water or Nuvan @ 0.05% or Cypermethrin @ 2 ml/ lit of water against leaf minor in nursery after rins.
French Bean	Sowing		 Spacings: for dwarf variety like Anupama (30x45 cm from seed to seed & row to row) and for pole type Local variety (Tangkhul hawai) at 60x60 cm with 2-3 seeds per hill. Apply 12-13 kg Urea, 12-15 kg SSP and 40-45 kg MOP per ha at the time of sowing.
Cucurbits	Nursery raising to land preparation for transplanting in open field		 Go for nursery rising in polybags (size: 8cm X 10cm) under low cost polyhouse. In the 50 kg mixture of garden soil, sand and FYM in the ratio 2:1:1 incorporate 2gm Captan 50W.P. One seed is sown per polybag and kept covered with polythene sheet till the seeds sprout. Light watering during morning hours may be done. Prepare land for transplanting 4-5 leave stage cucurbits seedlings in open field.
Tree bean/ Lime/ Lemon/ Khasi Mandarin/ Banana	Land preparation and collection of planting material		 - Preparation of pits or field for planting tree bean/ lime/ lemon/ khasi mandarin/ banana may be started. - Collect good quality planting material from known source.
Bhindi	Sowing		For sowing bhindi, land preparation may be done. Sowing of bhindi/ladies finger may be done at the spacing of 30cm x 45cm. Apply 20kg urea, 38kg SSP and 20kg MOP per sangam at final stage of land preparation before sowing. Recommended varieties are - Arka Anamika and Pusa Sawani



Manipur Centre, Lamphelpat, Imphal - 795 004





Chilli/ capsicum	Nursery to early		In chilies and capsicum, spray Sixer (Carbendazim 12% WP + Mancozeb 63%
	vegetative		WP) @ 2 g/ litre of water to control the fungal attack after rains.
			- Transplant nursery after rains in raised beds.
			- Give light watering to keep soil moist during vegetative phase.
			- 25 to 30 days old tomato seedlings may be transplanted in prepared land
	Transplanting to		incorporated with well decomposed FYM at a spacing of 40-45cm x 50-60cm
	vegetative		during evening/cloudy day. Apply Sevin dust @ $2.5 - 5.0$ g/ hill at the time of
Tomato/ Brinjal			transplanting to protect the seedlings from caterpillar/ cutworm. Bleaching
•			powder may also be applied @ 15kg/ ha to prevent bacterial wilt.
			- Apply 75:30:60 kg of NPK/ ha at the time of transplanting.
			- A light irrigation should be given just after transplanting
Omion/Conlin	Bulb formation		- During the bulb formation stage, check that the neck portion is not covered with
Onion/ Garlic			soil. Light hoeing and irrigation is necessary to keep soil moist during this phase.
Animal Sciences			
Name of the animal			
Name of bird/animal	Stage	Disease and	Agro-meteorological advisories
		Management	
	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
Poultry (Chicken/			Diseases in this time.
Turkey/ Duck)			1. F-1 Strain may be first administered within 7 days of age and second dose may
Turkey/ Duck)			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).
		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.
Sheen/ Goat	All age groups	Management	Use Butox @2ml in ltr of water and brush with the medicated water at forth night
Sheep, Gout	excepts the young		interval.
Sheep/ Goat	ones	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
	All age groups except the young		mg/kg b.wt. or Ivermectin @50mg/kg b. wt.
Pig		Care and	Provide clean water(drinking).
	ones	management	Add antibiotics in feed and water.
			vaccinate against FMD.
		Mites infestation	Spray with Skin Heal Spray in sufficient quantity.
		Deworming	➤ Give Piperazine liquid @ 10-15ml orally once only.
	All age groups		> If not vaccinated, give vaccine for Black Quarter now, Haemorrhagic
Cattle	excepts the young ones	B.Q./ H.S/FMD	septicaemia, Foot & Mouth Disease, etc.
		Ectoparasites	- Butox@ 2ml/lit of water at forth nightly interval.
	01100	Mastitis	Animals should be milked completely.
		Fodder cultivation	Fodder crops should be irrigated every 20-30 days and 20-22 days for oat
			cultivation.

SMS:

Lakliba Thangja amadi Nongmaijingda mafam kharada nong akanba nungsit akanbaga loinana chuba yai. Nong churaktaba matamda lou-u-bada sijinanaba nong ishing yoknaba sem-sabiyu. Loufamda nong ishing tungaga leisindanaba iram-nala ningthina semjinbiyu.



Manipur Centre, Lamphelpat, Imphal - 795 004





MANIPUR BULLETIN 10th March, 2017

Imphal East

Field Crops

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 11th to 15th March. 2017 as below:

Significant past weather for the preceding bi-weekly of Imphal - West (7^{th} to 9^{th} March, 2017)

Observed mainly clear to partly cloudy upto 8^{th} Mar morning then mainly cloudy to cloudy sky thereafter and **1.3 mm** rainfall was recorded during past three days. Maximum temperature range of 22.7 to 25.3 °C and rise in minimum temperature range of 8.3 to 13.6 °C with mean relative humidity 80.67 % max and 39.67 % min was recorded in the past four days. The average wind speed range remained 3.2 to 6.1 km/hr.

Weather forecast for next five days of Imphal East (11th to 15th March, 2017)

Likely to have heavy rainfall at isolated places during 11^{th} to 12^{th} March and partly cloudy to cloudy sky with maximum temp. $25-27^{\circ}$ C & minimum temp. $12-15^{\circ}$ C. Relative humidity may reach up to 100% (max RH) & 93 % (min RH). The average wind speed may be 2-6 km/hr. Wind direction may be North Easterly to Westerly during next five days.

*Harvest rain water for	use when required.		
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Pre-Kharif rice	Nursery to transplanting		 - Provisions may be done to repair or construct drainage system in and around the crop field. - Transplant the seedling at 20-25 days after sowing. - Before first ploughing of main field, apply well decomposed FYM @10-15 t/ha. After a cross plough, irrigate the field to 5-7 cm (2-3) inches depth. Submerge soil for 15-20 days before planting to obtain weed free plot. - At the time of final leveling, apply 97 kg Urea, 87Kg DAP and 45 Kg MOP per ha.
Pulses	Maturity to harvesting		- Harvest mature pods before rains and dry under shed to protect from rains.
Rabi maize	Vegetative	Stem borer	 Construct proper drainage system. To control the infestation of stem borer, apply few granules of Carbofuradan 3G at maize whorl.
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. - After proper drying, store grains in well ventilated godowns. Spray Malathion 1% in <i>godowns</i>.
Horticulture Crops			
* Apply life saving irrig	gation to passion fruit,	pineapple and other fr	uit crops and mulch with dry grass at the basin to conserve the soil moisture.
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Ginger & Turmeric	Land preparation		Sorting of rhizome for seed may be started for new planting. Land preparation for planting may be started.
Citrus	Nursery	Leaf Minor	- Spray Monocrotophos @ 1ml/ lit of water or Nuvan @ 0.05% or Cypermethrin @ 2 ml/ lit of water against leaf minor in nursery after rins.
French Bean	Sowing		 Spacings: for dwarf variety like Anupama (30x45 cm from seed to seed & row to row) and for pole type Local variety (Tangkhul hawai) at 60x60 cm with 2-3 seeds per hill. Apply 12-13 kg Urea, 12-15 kg SSP and 40-45 kg MOP per ha at the time of sowing.
Cucurbits	Nursery raising to land preparation for transplanting in open field		 Go for nursery rising in polybags (size: 8cm X 10cm) under low cost polyhouse. In the 50 kg mixture of garden soil, sand and FYM in the ratio 2:1:1 incorporate 2gm Captan 50W.P. One seed is sown per polybag and kept covered with polythene sheet till the seeds sprout. Light watering during morning hours may be done. Prepare land for transplanting 4-5 leave stage cucurbits seedlings in open field.
Tree bean/ Lime/ Lemon/ Khasi Mandarin/ Banana	Land preparation and collection of planting material		 - Preparation of pits or field for planting tree bean/ lime/ lemon/ khasi mandarin/ banana may be started. - Collect good quality planting material from known source.
Bhindi	Sowing		For sowing bhindi, land preparation may be done. Sowing of bhindi/ladies finger may be done at the spacing of 30cm x 45cm. Apply 20kg urea, 38kg SSP and 20kg MOP per sangam at final stage of land preparation before sowing. Recommended varieties are - Arka Anamika and Pusa Sawani



Manipur Centre, Lamphelpat, Imphal - 795 004





WP + Mancozeb 63% er rains.
er rains.
e phase.
l in prepared land
f 40-45cm x 50-60cm
.0 g/ hill at the time of
tworm. Bleaching
erial wilt.
ting.
g
ortion is not covered with
moist during this phase.
by March, there may be
against Ranikhet
age and second dose may
birds (layers).
irds and repeat it next
cated water at forth night
eworming agent.
dazole/ Levamisole @7.5
w, Haemorrhagic
Č .
•
0-22 days for oat
i con the contract of the cont

SMS:

Lakliba Thangja amadi Nongmaijingda mafam kharada nong akanba nungsit akanbaga loinana chuba yai. Nong churaktaba matamda lou-u-bada sijinanaba nong ishing yoknaba sem-sabiyu. Loufamda nong ishing tungaga leisindanaba iram-nala ningthina semjinbiyu.



Manipur Centre, Lamphelpat, Imphal - 795 004





MANIPUR BULLETIN 10th March, 2017

Imphal West

Field Crops

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 11th to 15th March, 2017 as below:

Significant past weather for the preceding bi-weekly of Imphal - West (7^{th} to 9^{th} March, 2017)

Observed mainly clear to partly cloudy upto 8^{th} Mar morning then mainly cloudy to cloudy sky thereafter and **1.3 mm** rainfall was recorded during past three days. Maximum temperature range of 22.7 to 25.3 °C and rise in minimum temperature range of 8.3 to 13.6 °C with mean relative humidity 80.67 % max and 39.67 % min was recorded in the past four days. The average wind speed range remained 3.2 to 6.1 km/hr.

Weather forecast for next five days of Imphal West (11th to 15th March, 2017)

Likely to have heavy rainfall at isolated places during 11^{th} to 12^{th} March and partly cloudy to cloudy sky with maximum temp. $24-27\,^{\circ}$ C & minimum temp. $13-16\,^{\circ}$ C. Relative humidity may reach up to $100\,\%$ (max RH) & 91 % (min RH). The average wind speed may be 2-5 km/hr. Wind direction may be Easterly to South Easterly during next five days.

*Harvest rain water for	use when required.		
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Pre-Kharif rice	Nursery to transplanting		 - Provisions may be done to repair or construct drainage system in and around the crop field. - Transplant the seedling at 20-25 days after sowing. - Before first ploughing of main field, apply well decomposed FYM @10-15 t/ha. After a cross plough, irrigate the field to 5-7 cm (2-3) inches depth. Submerge soil for 15-20 days before planting to obtain weed free plot. - At the time of final leveling, apply 97 kg Urea, 87Kg DAP and 45 Kg MOP per ha.
Pulses	Maturity to harvesting		- Harvest mature pods before rains and dry under shed to protect from rains.
			- Construct proper drainage system.
Rabi maize	Vegetative	Stem borer	- To control the infestation of stem borer, apply few granules of Carbofuradan 3G at maize whorl.
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. After proper drying, store grains in well ventilated godowns. Spray Malathion 1% in <i>godowns</i>.
Horticulture Crops			•
* Apply life saving irrig	gation to passion fruit,	pineapple and other fr	uit crops and mulch with dry grass at the basin to conserve the soil moisture.
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Ginger & Turmeric	Land preparation		Sorting of rhizome for seed may be started for new planting. Land preparation for planting may be started.
Citrus	Nursery	Leaf Minor	- Spray Monocrotophos @ 1ml/ lit of water or Nuvan @ 0.05% or Cypermethrin @ 2 ml/ lit of water against leaf minor in nursery after rins.
French Bean	Sowing		 Spacings: for dwarf variety like Anupama (30x45 cm from seed to seed & row to row) and for pole type Local variety (Tangkhul hawai) at 60x60 cm with 2-3 seeds per hill. Apply 12-13 kg Urea, 12-15 kg SSP and 40-45 kg MOP per ha at the time of sowing.
Cucurbits	Nursery raising to land preparation for transplanting in open field		 Go for nursery rising in polybags (size: 8cm X 10cm) under low cost polyhouse. In the 50 kg mixture of garden soil, sand and FYM in the ratio 2:1:1 incorporate 2gm Captan 50W.P. One seed is sown per polybag and kept covered with polythene sheet till the seeds sprout. Light watering during morning hours may be done. Prepare land for transplanting 4-5 leave stage cucurbits seedlings in open field.
Tree bean/ Lime/	Land preparation		- Preparation of pits or field for planting tree bean/ lime/ lemon/ khasi mandarin/
Lemon/ Khasi	and collection of		banana may be started.
Mandarin/ Banana	planting material		- Collect good quality planting material from known source.
Bhindi	Sowing		For sowing bhindi, land preparation may be done. Sowing of bhindi/ladies finger may be done at the spacing of 30cm x 45cm. Apply 20kg urea, 38kg SSP and 20kg MOP per sangam at final stage of land preparation before sowing. Recommended varieties are - Arka Anamika and Pusa Sawani



Manipur Centre, Lamphelpat, Imphal - 795 004





WP + Mancozeb 63% er rains.
er rains.
e phase.
l in prepared land
f 40-45cm x 50-60cm
.0 g/ hill at the time of
tworm. Bleaching
erial wilt.
ting.
g
ortion is not covered with
moist during this phase.
by March, there may be
against Ranikhet
age and second dose may
birds (layers).
irds and repeat it next
cated water at forth night
eworming agent.
dazole/ Levamisole @7.5
w, Haemorrhagic
Č .
•
0-22 days for oat
i con the contract of the cont

SMS:

Lakliba Thangja amadi Nongmaijingda mafam kharada nong akanba nungsit akanbaga loinana chuba yai. Nong churaktaba matamda lou-u-bada sijinanaba nong ishing yoknaba sem-sabiyu. Loufamda nong ishing tungaga leisindanaba iram-nala ningthina semjinbiyu.