



ICAR Research Complex for N.E.H. Region
Manipur Centre, Lamphelpat, Imphal - 795 004
“Gramin Krishi Mausam Seva”

**MANIPUR BULLETIN****20th September, 2018****Imphal East**

GKMS at AMFU- Lamphelpat, ICAR-RC Manipur Centre in association with India Meteorological Department, Regional Meteorological Centre, Guwahati and India Meteorological Department, New Delhi, Ministry of Earth Science, Govt. of India reports the weather forecasts for the next five days, i.e., from 21st to 25th September, 2018 as below:

Significant past weather for the preceding bi-weekly of Imphal - West (18th and 19th September, 2018)

Observed **14.0 mm** rainfall with **mainly cloudy to overcast sky**. Maximum temperature recorded ranged from **30.4 to 33.7 °C** and minimum of **21.7 to 21.9 °C** with mean relative humidity **91.0 %** max and **63.5 %** min was recorded in the past three days & average wind speed was **2.1– 2.6 km/ hr**.

Weather forecast for next five days of Imphal East (21st to 25th September, 2018)

Likely to have thunderstorm accompanied with lightning at isolated places on Friday and mainly cloudy sky with maximum temp. **32-35 °C** & minimum temp. **23 °C**. Relative humidity may reach upto **99 %** (max RH) & **83 %** (min RH). The average wind speed may be **2-4 km/hr**.

Field Crops			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Rice	Milky and dough stage		- Maintain water level at 5-8 cm.
		Aphid, mealy bugs	Spray Fipronil @ 2g/15 litres or Imidachloprid 17.8 SL @ 7 ml/ 15 litres of water after rains.
		Plant Hoppers or Thrips	Spray Coragen 3-5 ml per 15 lit of water after rains at the early stage of infestation.
		Sheath blight/ Bakani	Carbendazim @ 30-40g/ 15 lit of water or Hexaconazole @ 15ml/ 15 lit of water after rains.
		Smut disease of rice	Kocide @ 5g/15lit water (spray after 2:00 pm only) to the crops in flowering stage after rains.
Soybean/ Groundnut	Fruiting to seed maturity		Weeding may be done if weed population is high after rains. Prepare wind breaks to avoid high speed winds.
Blackgram/ Rice Bean	Fruiting to seed maturity		Weeding may be done if weed population is high after rains. Prepare wind breaks to avoid high speed winds.
Seeds storage	Post-harvest management		For seed purpose store the seeds in RC-Seed Bin after proper drying and cleaning of seeds along with dry charcoal at 80:20 w/w ratios. Check for moisture content or weight of charcoal and dry if required. For grains, store grains in well ventilated godowns after drying properly. Spray Malathion 1% on the walls of stores.
Horticulture Crops			
* For nurseries, dip root in Carbendazim @ 10g/ 5 lit water for 30 min before transplanting in raised beds.			
* Wind breaks may be prepared for young plants of nursery in open fields.			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Rabi vegetables	Land preparation		Procure good quality seeds of carrot, raddish, coriander, cauliflower, cabbage, broccoli, etc. Prepare land for sowing or planting after rains.
Tree bean	Trees above 7yrs age/ Bearing plants		Apply (60gm DAP + 10g MOP + 20g Carbofuran 3G / per plant.
Cauliflower	Vegetative stage of main season crop	Plutella Diamondback moth	- To kill early weeds shallow cultivation should be given using hoe or khurpi. - Check for infestation of Plutella Diamondback moth in young plants. If the plant is young then hand picking is advised otherwise neem based pesticides may be sprayed.
	nursery of late crop		- Raise late crop cauliflower nursery. - Sterilize nursery bed soil. Soil fumigation/ soil solarization may be done for both weeds and soil microbes. For this chemical or bioagents may be used as per choice. - Mix seeds with soil for better distribution of seeds while broadcasting and maintain a spacing of 2 inches between rows.
Potato	Land preparation to planting		- Prepare land with fertile and sandy loam soil. Planting may be done after rains. Treat seeds before planting.
Onion	Nursery		Preparation for raising nursery (variety- Nasik Red) in slightly cooler and drier area in bright sunshine.



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Manipur Centre, Lamphelpat, Imphal - 795 004
“Gramin Krishi Mausam Seva”



French Bean, Broad bean & Pea	Land preparation		<ul style="list-style-type: none"> - After harvesting of colocasia/ cucurbits, raised beds may now be prepared as for sowing of pea/ french bean/ broad bean. - Recommended varieties for French bean are – Pant Anupam, Anupam (to be planted at a spacing of 30cm x 45cm) and Tangkhul Hawai (local) (to be planted at a spacing of 30cm x 60cm with 2-3 seeds per hill). For broad bean, plant local variety at a spacing of 30cm x 45cm. And for pea, Arkel or Azad may be planted at a spacing of 10 cm x 30cm.
Ginger/ Turmeric	Rhizome initiation	Shoot borer	<ul style="list-style-type: none"> - Spray Nimbecidine @ 2-5ml/lit water.
Animal Sciences			
* Provide clean drinking water for birds and animals. Drainage may be constructed well around the birds or animals sheds to avoid water logging. * Check for the good condition of sheds of birds and animals.			
Name of bird/ animal	Stage	Disease and Management	Agro-meteorological advisories
Poultry (Chicken/ Duck)	All age groups	• Vaccination	• Vaccinate birds against Fowl Pox.
		• Deworming	• Deworming against Helminth parasites using Piperazine liquid @ 30-40ml for 100 birds in drinking water. Again give half of the dose on second day.
		• Contingency plan and management	Give ENROX liq. @ 2ml/ 10 kg body weight for 5 days. Give green grasses sufficiently & mix with ground maize/ rice bran. Add mineral mixture & vitamins either in feed or water or both. Start keeping new batch chicks in case of layer variety.
Sheep/ Goat	All age groups	• Vaccination	• If the animals are not vaccinated against F.M.D., B.Q., H.S., Enterotoxaemia, etc. do it in this month.
		• Fasciolosis	• Give Tolzan-F @ 15ml orally/ kg b. wt. It must be associated with vitamins like Livozyme @ 50ml twice daily.
		• Management	• Protect from thunder showers. Protect from after winds (loo). • Avoid flies by using Basil/ bouquets of Nirgundi or lemon grass by hanging.
Pig	All age groups except the young ones	• De-worming	• Deworming against Helminth parasites using Piperazine citrate @ 30 ml per adult animal once.
		• Coccidial infection (Diarrhea)	• Ofloxacin tab twice daily for 5 days.
		• Ticks	• Add Butox liquid @ 2 ml/ lit of water and use the solution twice a week while brushing the animal.
		• Vaccination	• Vaccinate against FMD.
		• Management	• Give mineral mixture like Vimicon and Ascagold suspension in pregnant sow @ 20g and 20ml resp. in feed.
Cattle	All age groups excepts the young ones	• Vaccination	• Vaccinate against B.Q., F.M.D. & H.S. if not yet vaccinated.
		• Deworming	• De-worm with Albomac suspension @ 60-90ml for 300kg body weight or 20-30ml for 100 kg body weight.
		• Endoparasite/ Ectoparasite	• Inject Ivomec @ 1 ml/ 50 kg body weight.
		• Care & Management	• Give mineral mixture @ 30-50g daily.
		• Milk fever	• Give 100-150ml of mixture calcium and phosphorous daily.

(I. Meghachandra Singh)
Scientist i/c, GKMS



ICAR Research Complex for N.E.H. Region
Manipur Centre, Lamphelpat, Imphal - 795 004
“Gramin Krishi Mausam Seva”

**MANIPUR BULLETIN****20th September, 2018****Imphal West**

GKMS at AMFU- Lamphelpat, ICAR-RC Manipur Centre in association with India Meteorological Department, Regional Meteorological Centre, Guwahati and India Meteorological Department, New Delhi, Ministry of Earth Science, Govt. of India reports the weather forecasts for the next five days, i.e., from 21st to 25th September, 2018 as below:

Significant past weather for the preceding bi-weekly of Imphal - West (18th and 19th September, 2018)

Observed **14.0 mm** rainfall with **mainly cloudy to overcast sky**. Maximum temperature recorded ranged from **30.4 to 33.7 °C** and minimum of **21.7 to 21.9 °C** with mean relative humidity **91.0 %** max and **63.5 %** min was recorded in the past three days & average wind speed was **2.1– 2.6 km/ hr**.

Weather forecast for next five days of Imphal West (21st to 25th September, 2018)

Likely to have thunderstorm accompanied with lightning at isolated places on Friday and mainly cloudy sky with maximum temp. **32-35 °C** & minimum temp. **23 °C**. Relative humidity may reach upto **98 %** (max RH) & **70 %** (min RH). The average wind speed may be **0-6 km/hr**.

Field Crops

Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Rice	Milky and dough stage		- Maintain water level at 5-8 cm.
		Aphid, mealy bugs	Spray Fipronil @ 2g/15 litres or Imidachloprid 17.8 SL @ 7 ml/ 15 litres of water after rains.
		Plant Hoppers or Thrips	Spray Coragen 3-5 ml per 15 lit of water after rains at the early stage of infestation.
		Sheath blight/ Bakani	Carbendazim @ 30-40g/ 15 lit of water or Hexaconazole @ 15ml/ 15 lit of water after rains.
		Smut disease of rice	Kocide @ 5g/15lit water (spray after 2:00 pm only) to the crops in flowering stage after rains.
Soybean/ Groundnut	Fruiting to seed maturity		Weeding may be done if weed population is high after rains. Prepare wind breaks to avoid high speed winds.
Blackgram/ Rice Bean	Fruiting to seed maturity		Weeding may be done if weed population is high after rains. Prepare wind breaks to avoid high speed winds.
Seeds storage	Post-harvest management		For seed purpose store the seeds in RC-Seed Bin after proper drying and cleaning of seeds along with dry charcoal at 80:20 w/w ratios. Check for moisture content or weight of charcoal and dry if required. For grains, store grains in well ventilated godowns after drying properly. Spray Malathion 1% on the walls of stores.

Horticulture Crops

* For nurseries, dip root in Carbendazim @ 10g/ 5 lit water for 30 min before transplanting in raised beds.

* Wind breaks may be prepared for young plants of nursery in open fields.

Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Rabi vegetables	Land preparation		Procure good quality seeds of carrot, raddish, coriander, cauliflower, cabbage, broccoli, etc. Prepare land for sowing or planting after rains.
Tree bean	Trees above 7yrs age/ Bearing plants		Apply (60gm DAP + 10g MOP + 20g Carbofuran 3G / per plant.
Cauliflower	Vegetative stage of main season crop	Plutella Diamondback moth	- To kill early weeds shallow cultivation should be given using hoe or khurpi. - Check for infestation of Plutella Diamondback moth in young plants. If the plant is young then hand picking is advised otherwise neem based pesticides may be sprayed.
	nursery of late crop		- Raise late crop cauliflower nursery. - Sterilize nursery bed soil. Soil fumigation/ soil solarization may be done for both weeds and soil microbes. For this chemical or bioagents may be used as per choice. - Mix seeds with soil for better distribution of seeds while broadcasting and maintain a spacing of 2 inches between rows.
Potato	Land preparation to planting		- Prepare land with fertile and sandy loam soil. Planting may be done after rains. Treat seeds before planting.
Onion	Nursery		Preparation for raising nursery (variety- Nasik Red) in slightly cooler and drier area in bright sunshine.



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Manipur Centre, Lamphelpat, Imphal - 795 004
“Gramin Krishi Mausam Seva”



French Bean, Broad bean & Pea	Land preparation		<ul style="list-style-type: none"> - After harvesting of colocasia/ cucurbits, raised beds may now be prepared as for sowing of pea/ french bean/ broad bean. - Recommended varieties for French bean are – Pant Anupam, Anupam (to be planted at a spacing of 30cm x 45cm) and Tangkhul Hawai (local) (to be planted at a spacing of 30cm x 60cm with 2-3 seeds per hill). For broad bean, plant local variety at a spacing of 30cm x 45cm. And for pea, Arkel or Azad may be planted at a spacing of 10 cm x 30cm.
Ginger/ Turmeric	Rhizome initiation	Shoot borer	<ul style="list-style-type: none"> - Spray Nimbecidine @ 2-5ml/lit water.
Animal Sciences			
* Provide clean drinking water for birds and animals. Drainage may be constructed well around the birds or animals sheds to avoid water logging. * Check for the good condition of sheds of birds and animals.			
Name of bird/ animal	Stage	Disease and Management	Agro-meteorological advisories
Poultry (Chicken/ Duck)	All age groups	• Vaccination	• Vaccinate birds against Fowl Pox.
		• Deworming	• Deworming against Helminth parasites using Piperazine liquid @ 30-40ml for 100 birds in drinking water. Again give half of the dose on second day.
		• Contingency plan and management	Give ENROX liq. @ 2ml/ 10 kg body weight for 5 days. Give green grasses sufficiently & mix with ground maize/ rice bran. Add mineral mixture & vitamins either in feed or water or both. Start keeping new batch chicks in case of layer variety.
Sheep/ Goat	All age groups	• Vaccination	• If the animals are not vaccinated against F.M.D., B.Q., H.S., Enterotoxaemia, etc. do it in this month.
		• Fascioliosis	• Give Tolzan-F @ 15ml orally/ kg b. wt. It must be associated with vitamins like Livozyme @ 50ml twice daily.
		• Management	• Protect from thunder showers. Protect from after winds (loo). • Avoid flies by using Basil/ bouquets of Nirgundi or lemon grass by hanging.
Pig	All age groups except the young ones	• De-worming	• Deworming against Helminth parasites using Piperazine citrate @ 30 ml per adult animal once.
		• Coccidial infection (Diarrhea)	• Ofloxacin tab twice daily for 5 days.
		• Ticks	• Add Butox liquid @ 2 ml/ lit of water and use the solution twice a week while brushing the animal.
		• Vaccination	• Vaccinate against FMD.
		• Management	• Give mineral mixture like Vimicon and Ascagold suspension in pregnant sow @ 20g and 20ml resp. in feed.
Cattle	All age groups excepts the young ones	• Vaccination	• Vaccinate against B.Q., F.M.D. & H.S. if not yet vaccinated.
		• Deworming	• De-worm with Albomac suspension @ 60-90ml for 300kg body weight or 20-30ml for 100 kg body weight.
		• Endoparasite/ Ectoparasite	• Inject Ivomec @ 1 ml/ 50 kg body weight.
		• Care & Management	• Give mineral mixture @ 30-50g daily.
		• Milk fever	• Give 100-150ml of mixture calcium and phosphorous daily.

(I. Meghachandra Singh)
Scientist i/c, GKMS



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“Gramin Krishi Mausam Seva”

**MANIPUR BULLETIN****20th September, 2018**Senapati

GKMS at AMFU- Lamphelpat, ICAR-RC Manipur Centre in association with India Meteorological Department, Regional Meteorological Centre, Guwahati and India Meteorological Department, New Delhi, Ministry of Earth Science, Govt. of India reports the weather forecasts for the next five days, i.e., from 21st to 25th September, 2018 as below:

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Weather forecast for next five days of Senapati (21st to 25th September, 2018)

Likely to have thunderstorm accompanied with lightning at isolated places on Friday and mainly cloudy sky with maximum temp. **30-33 °C** & minimum temp. **20-22 °C**. Relative humidity may reach upto **99 %** (max RH) & **85 %** (min RH). The average wind speed may be **3-4 km/hr**.

Field Crops			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Rice	Milky and dough stage		- Maintain water level at 5-8 cm.
		Aphid, mealy bugs	Spray Fipronil @ 2g/15 litres or Imidachloprid 17.8 SL @ 7 ml/ 15 litres of water after rains.
		Plant Hoppers or Thrips	Spray Coragen 3-5 ml per 15 lit of water after rains at the early stage of infestation.
		Sheath blight/ Bakani	Carbendazim @ 30-40g/ 15 lit of water or Hexaconazole @ 15ml/ 15 lit of water after rains.
		Smut disease of rice	Kocide @ 5g/15lit water (spray after 2:00 pm only) to the crops in flowering stage after rains.
Soybean/ Groundnut	Fruiting to seed maturity		Weeding may be done if weed population is high after rains. Prepare wind breaks to avoid high speed winds.
Blackgram/ Rice Bean	Fruiting to seed maturity		Weeding may be done if weed population is high after rains. Prepare wind breaks to avoid high speed winds.
Seeds storage	Post-harvest management		For seed purpose store the seeds in RC-Seed Bin after proper drying and cleaning of seeds along with dry charcoal at 80:20 w/w ratios. Check for moisture content or weight of charcoal and dry if required. For grains, store grains in well ventilated godowns after drying properly. Spray Malathion 1% on the walls of stores.
Horticulture Crops			
* For nurseries, dip root in Carbendazim @ 10g/ 5 lit water for 30 min before transplanting in raised beds.			
* Wind breaks may be prepared for young plants of nursery in open fields.			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Tree bean	Trees above 7yrs age/ Bearing plants		Apply (60gm DAP + 10g MOP + 20g Carbofuran 3G / per plant.
Cauliflower	Vegetative stage of main season crop	Plutella Diamondback moth	- To kill early weeds shallow cultivation should be given using hoe or khurpi. - Check for infestation of Plutella Diamondback moth in young plants. If the plant is young then hand picking is advised otherwise neem based pesticides may be sprayed.
	nursery of late crop		- Raise late crop cauliflower nursery. - Sterilize nursery bed soil. Soil fumigation/ soil solarization may be done for both weeds and soil microbes. For this chemical or bioagents may be used as per choice. - Mix seeds with soil for better distribution of seeds while broadcasting and maintain a spacing of 2 inches between rows.
French Bean, Broad bean & Pea	Land preparation		- After harvesting of colocasia/ cucurbits, raised beds may now be prepared as for sowing of pea/ french bean/ broad bean. - Recommended varieties for French bean are – Pant Anupam, Anupam (to be planted at a spacing of 30cm x 45cm) and Tangkhul Hawai (local) (to be planted at a spacing of 30cm x 60cm with 2-3 seeds per hill). For broad bean, plant local variety at a spacing of 30cm x 45cm. And for pea, Arkel or Azad may be planted at a spacing of 10 cm x 30cm.
Ginger/ Turmeric	Rhizome initiation	Shoot borer	- Spray Nimbicidine @ 2-5ml/lit water.
Animal Sciences			

**ICAR Research Complex for N.E.H. Region**

Manipur Centre, Lamphelpat, Imphal - 795 004

“Gramin Krishi Mausam Seva”

* Provide clean drinking water for birds and animals. Drainage may be constructed well around the birds or animals sheds to avoid water logging.

* Check for the good condition of sheds of birds and animals.

Name of bird/ animal	Stage	Disease and Management	Agro-meteorological advisories
Poultry (Chicken/ Duck)	All age groups	• Vaccination	• Vaccinate birds against Fowl Pox.
		• Deworming	• Deworming against Helminth parasites using Piperazine liquid @ 30-40ml for 100 birds in drinking water. Again give half of the dose on second day.
		• Contingency plan and management	Give ENROX liq. @ 2ml/ 10 kg body weight for 5 days. Give green grasses sufficiently & mix with ground maize/ rice bran. Add mineral mixture & vitamins either in feed or water or both. Start keeping new batch chicks in case of layer variety.
Sheep/ Goat	All age groups	• Vaccination	• If the animals are not vaccinated against F.M.D., B.Q., H.S., Enterotoxaemia, etc. do it in this month.
		• Fascioliosis	• Give Tolzan-F @ 15ml orally/ kg b. wt. It must be associated with vitamins like Livozyme @ 50ml twice daily.
		• Management	• Protect from thunder showers. Protect from after winds (loo). • Avoid flies by using Basil/ bouquets of Nirgundi or lemon grass by hanging.
Pig	All age groups except the young ones	• De-worming	• Deworming against Helminth parasites using Piperazine citrate @ 30 ml per adult animal once.
		• Coccidial infection (Diarrhea)	• Ofloxacin tab twice daily for 5 days.
		• Ticks	• Add Butox liquid @ 2 ml/ lit of water and use the solution twice a week while brushing the animal.
		• Vaccination	• Vaccinate against FMD.
		• Management	• Give mineral mixture like Vimicon and Ascagold suspension in pregnant sow @ 20g and 20ml resp. in feed.
Cattle	All age groups excepts the young ones	• Vaccination	• Vaccinate against B.Q., F.M.D. & H.S. if not yet vaccinated.
		• Deworming	• De-worm with Albomac suspension @ 60-90ml for 300kg body weight or 20-30ml for 100 kg body weight.
		• Endoparasite/ Ectoparasite	• Inject Ivomec @ 1 ml/ 50 kg body weight.
		• Care & Management	• Give mineral mixture @ 30-50g daily.
		• Milk fever	• Give 100-150ml of mixture calcium and phosphorous daily.

(I. Meghachandra Singh)
Scientist i/c, GKMS



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**MANIPUR BULLETIN****20th September, 2018****Tamenglong**

GKMS at AMFU- Lamphelpat, ICAR-RC Manipur Centre in association with India Meteorological Department, Regional Meteorological Centre, Guwahati and India Meteorological Department, New Delhi, Ministry of Earth Science, Govt. of India reports the weather forecasts for the next five days, i.e., from 21st to 25th September, 2018 as below:

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Weather forecast for next five days of Tamenglong (21st to 25th September, 2018)

Likely to have thunderstorm accompanied with lightning at isolated places on Friday and mainly cloudy sky with maximum temp. **33-36 °C** & minimum temp. **24-25 °C**. Relative humidity may reach upto **99 %** (max RH) & **73 %** (min RH). The average wind speed may be **2-5 km/hr**.

Field Crops			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Rice	Milky and dough stage		- Maintain water level at 5-8 cm.
		Aphid, mealy bugs	Spray Fipronil @ 2g/15 litres or Imidachloprid 17.8 SL @ 7 ml/ 15 litres of water after rains.
		Plant Hoppers or Thrips	Spray Coragen 3-5 ml per 15 lit of water after rains at the early stage of infestation.
		Sheath blight/ Bakani	Carbendazim @ 30-40g/ 15 lit of water or Hexaconazole @ 15ml/ 15 lit of water after rains.
		Smut disease of rice	Kocide @ 5g/15lit water (spray after 2:00 pm only) to the crops in flowering stage after rains.
Soybean/ Groundnut	Fruiting to seed maturity		Weeding may be done if weed population is high after rains. Prepare wind breaks to avoid high speed winds.
Blackgram/ Rice Bean	Fruiting to seed maturity		Weeding may be done if weed population is high after rains. Prepare wind breaks to avoid high speed winds.
Seeds storage	Post-harvest management		For seed purpose store the seeds in RC-Seed Bin after proper drying and cleaning of seeds along with dry charcoal at 80:20 w/w ratios. Check for moisture content or weight of charcoal and dry if required. For grains, store grains in well ventilated godowns after drying properly. Spray Malathion 1% on the walls of stores.
Horticulture Crops			
* For nurseries, dip root in Carbendazim @ 10g/ 5 lit water for 30 min before transplanting in raised beds.			
* Wind breaks may be prepared for young plants of nursery in open fields.			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Rabi vegetables	Land preparation		Procure good quality seeds of carrot, raddish, coriander, cauliflower, cabbage, broccoli, etc. Prepare land for sowing or planting after rains.
Tree bean	Trees above 7yrs age/ Bearing plants		Apply (60gm DAP + 10g MOP + 20g Carbofuran 3G / per plant.
Cauliflower	Vegetative stage of main season crop	Plutella Diamondback moth	- To kill early weeds shallow cultivation should be given using hoe or khurpi. - Check for infestation of Plutella Diamondback moth in young plants. If the plant is young then hand picking is advised otherwise neem based pesticides may be sprayed.
	nursery of late crop		- Raise late crop cauliflower nursery. - Sterilize nursery bed soil. Soil fumigation/ soil solarization may be done for both weeds and soil microbes. For this chemical or bioagents may be used as per choice. - Mix seeds with soil for better distribution of seeds while broadcasting and maintain a spacing of 2 inches between rows.
Potato	Land preparation to planting		- Prepare land with fertile and sandy loam soil. Planting may be done after rains. Treat seeds before planting.
Onion	Nursery		Preparation for raising nursery (variety- Nasik Red) in slightly cooler and drier area in bright sunshine.



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French Bean, Broad bean & Pea	Land preparation		<ul style="list-style-type: none"> - After harvesting of colocasia/ cucurbits, raised beds may now be prepared as for sowing of pea/ french bean/ broad bean. - Recommended varieties for French bean are – Pant Anupam, Anupam (to be planted at a spacing of 30cm x 45cm) and Tangkhul Hawai (local) (to be planted at a spacing of 30cm x 60cm with 2-3 seeds per hill). For broad bean, plant local variety at a spacing of 30cm x 45cm. And for pea, Arkel or Azad may be planted at a spacing of 10 cm x 30cm.
Ginger/ Turmeric	Rhizome initiation	Shoot borer	<ul style="list-style-type: none"> - Spray Nimbecidine @ 2-5ml/lit water.
Animal Sciences			
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		• Contingency plan and management	Give ENROX liq. @ 2ml/ 10 kg body weight for 5 days. Give green grasses sufficiently & mix with ground maize/ rice bran. Add mineral mixture & vitamins either in feed or water or both. Start keeping new batch chicks in case of layer variety.
Sheep/ Goat	All age groups	• Vaccination	• If the animals are not vaccinated against F.M.D., B.Q., H.S., Enterotoxaemia, etc. do it in this month.
		• Fascioliosis	• Give Tolzan-F @ 15ml orally/ kg b. wt. It must be associated with vitamins like Livozyme @ 50ml twice daily.
		• Management	• Protect from thunder showers. Protect from after winds (loo). • Avoid flies by using Basil/ bouquets of Nirgundi or lemon grass by hanging.
Pig	All age groups except the young ones	• De-worming	• Deworming against Helminth parasites using Piperazine citrate @ 30 ml per adult animal once.
		• Coccidial infection (Diarrhea)	• Ofloxacin tab twice daily for 5 days.
		• Ticks	• Add Butox liquid @ 2 ml/ lit of water and use the solution twice a week while brushing the animal.
		• Vaccination	• Vaccinate against FMD.
		• Management	• Give mineral mixture like Vimicon and Ascagold suspension in pregnant sow @ 20g and 20ml resp. in feed.
Cattle	All age groups excepts the young ones	• Vaccination	• Vaccinate against B.Q., F.M.D. & H.S. if not yet vaccinated.
		• Deworming	• De-worm with Albomac suspension @ 60-90ml for 300kg body weight or 20-30ml for 100 kg body weight.
		• Endoparasite/ Ectoparasite	• Inject Ivomec @ 1 ml/ 50 kg body weight.
		• Care & Management	• Give mineral mixture @ 30-50g daily.
		• Milk fever	• Give 100-150ml of mixture calcium and phosphorous daily.

(I. Meghachandra Singh)
Scientist i/c, GKMS



ICAR Research Complex for N.E.H. Region
Manipur Centre, Lamphelpat, Imphal - 795 004
“Gramin Krishi Mausam Seva”

**MANIPUR BULLETIN****20th September, 2018****Thoubal**

GKMS at AMFU- Lamphelpat, ICAR-RC Manipur Centre in association with India Meteorological Department, Regional Meteorological Centre, Guwahati and India Meteorological Department, New Delhi, Ministry of Earth Science, Govt. of India reports the weather forecasts for the next five days, i.e., from 21st to 25th September, 2018 as below:

Significant past weather for the preceding bi-weekly of Imphal - West (18th and 19th September, 2018)

Observed **14.0 mm** rainfall with **mainly cloudy to overcast sky**. Maximum temperature recorded ranged from **30.4 to 33.7 °C** and minimum of **21.7 to 21.9 °C** with mean relative humidity **91.0 %** max and **63.5 %** min was recorded in the past three days & average wind speed was **2.1– 2.6 km/ hr**.

Weather forecast for next five days of Thoubal (21st to 25th September, 2018)

Likely to have thunderstorm accompanied with lightning at isolated places on Friday and mainly cloudy sky with maximum temp. **32-35 °C** & minimum temp. **23 °C**. Relative humidity may reach upto **100 %** (max RH) & **93 %** (min RH). The average wind speed may be **3-6 km/hr**.

Field Crops			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Rice	Milky and dough stage		- Maintain water level at 5-8 cm.
		Aphid, mealy bugs	Spray Fipronil @ 2g/15 litres or Imidachloprid 17.8 SL @ 7 ml/ 15 litres of water after rains.
		Plant Hoppers or Thrips	Spray Coragen 3-5 ml per 15 lit of water after rains at the early stage of infestation.
		Sheath blight/ Bakani	Carbendazim @ 30-40g/ 15 lit of water or Hexaconazole @ 15ml/ 15 lit of water after rains.
		Smut disease of rice	Kocide @ 5g/15lit water (spray after 2:00 pm only) to the crops in flowering stage after rains.
Soybean/ Groundnut	Fruiting to seed maturity		Weeding may be done if weed population is high after rains. Prepare wind breaks to avoid high speed winds.
Blackgram/ Rice Bean	Fruiting to seed maturity		Weeding may be done if weed population is high after rains. Prepare wind breaks to avoid high speed winds.
Seeds storage	Post-harvest management		For seed purpose store the seeds in RC-Seed Bin after proper drying and cleaning of seeds along with dry charcoal at 80:20 w/w ratios. Check for moisture content or weight of charcoal and dry if required. For grains, store grains in well ventilated godowns after drying properly. Spray Malathion 1% on the walls of stores.
Horticulture Crops			
* For nurseries, dip root in Carbendazim @ 10g/ 5 lit water for 30 min before transplanting in raised beds.			
* Wind breaks may be prepared for young plants of nursery in open fields.			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Rabi vegetables	Land preparation		Procure good quality seeds of carrot, raddish, coriander, cauliflower, cabbage, broccoli, etc. Prepare land for sowing or planting after rains.
Tree bean	Trees above 7yrs age/ Bearing plants		Apply (60gm DAP + 10g MOP + 20g Carbofuran 3G / per plant.
Cauliflower	Vegetative stage of main season crop	Plutella Diamondback moth	- To kill early weeds shallow cultivation should be given using hoe or khurpi. - Check for infestation of Plutella Diamondback moth in young plants. If the plant is young then hand picking is advised otherwise neem based pesticides may be sprayed.
	nursery of late crop		- Raise late crop cauliflower nursery. - Sterilize nursery bed soil. Soil fumigation/ soil solarization may be done for both weeds and soil microbes. For this chemical or bioagents may be used as per choice. - Mix seeds with soil for better distribution of seeds while broadcasting and maintain a spacing of 2 inches between rows.
Potato	Land preparation to planting		- Prepare land with fertile and sandy loam soil. Planting may be done after rains. Treat seeds before planting.
Onion	Nursery		Preparation for raising nursery (variety- Nasik Red) in slightly cooler and drier area in bright sunshine.



ICAR Research Complex for N.E.H. Region
Manipur Centre, Lamphelpat, Imphal - 795 004
“Gramin Krishi Mausam Seva”



French Bean, Broad bean & Pea	Land preparation		<ul style="list-style-type: none"> - After harvesting of colocasia/ cucurbits, raised beds may now be prepared as for sowing of pea/ french bean/ broad bean. - Recommended varieties for French bean are – Pant Anupam, Anupam (to be planted at a spacing of 30cm x 45cm) and Tangkhul Hawai (local) (to be planted at a spacing of 30cm x 60cm with 2-3 seeds per hill). For broad bean, plant local variety at a spacing of 30cm x 45cm. And for pea, Arkel or Azad may be planted at a spacing of 10 cm x 30cm.
Ginger/ Turmeric	Rhizome initiation	Shoot borer	<ul style="list-style-type: none"> - Spray Nimbecidine @ 2-5ml/lit water.
Animal Sciences			
* Provide clean drinking water for birds and animals. Drainage may be constructed well around the birds or animals sheds to avoid water logging. * Check for the good condition of sheds of birds and animals.			
Name of bird/ animal	Stage	Disease and Management	Agro-meteorological advisories
Poultry (Chicken/ Duck)	All age groups	• Vaccination	• Vaccinate birds against Fowl Pox.
		• Deworming	• Deworming against Helminth parasites using Piperazine liquid @ 30-40ml for 100 birds in drinking water. Again give half of the dose on second day.
		• Contingency plan and management	Give ENROX liq. @ 2ml/ 10 kg body weight for 5 days. Give green grasses sufficiently & mix with ground maize/ rice bran. Add mineral mixture & vitamins either in feed or water or both. Start keeping new batch chicks in case of layer variety.
Sheep/ Goat	All age groups	• Vaccination	• If the animals are not vaccinated against F.M.D., B.Q., H.S., Enterotoxaemia, etc. do it in this month.
		• Fasciolosis	• Give Tolzan-F @ 15ml orally/ kg b. wt. It must be associated with vitamins like Livozyme @ 50ml twice daily.
		• Management	• Protect from thunder showers. Protect from after winds (loo). • Avoid flies by using Basil/ bouquets of Nirgundi or lemon grass by hanging.
Pig	All age groups except the young ones	• De-worming	• Deworming against Helminth parasites using Piperazine citrate @ 30 ml per adult animal once.
		• Coccidial infection (Diarrhea)	• Ofloxacin tab twice daily for 5 days.
		• Ticks	• Add Butox liquid @ 2 ml/ lit of water and use the solution twice a week while brushing the animal.
		• Vaccination	• Vaccinate against FMD.
		• Management	• Give mineral mixture like Vimicon and Ascagold suspension in pregnant sow @ 20g and 20ml resp. in feed.
Cattle	All age groups excepts the young ones	• Vaccination	• Vaccinate against B.Q., F.M.D. & H.S. if not yet vaccinated.
		• Deworming	• De-worm with Albomac suspension @ 60-90ml for 300kg body weight or 20-30ml for 100 kg body weight.
		• Endoparasite/ Ectoparasite	• Inject Ivomec @ 1 ml/ 50 kg body weight.
		• Care & Management	• Give mineral mixture @ 30-50g daily.
		• Milk fever	• Give 100-150ml of mixture calcium and phosphorous daily.

(I. Meghachandra Singh)
Scientist i/c, GKMS



ICAR Research Complex for N.E.H. Region
Manipur Centre, Lamphelpat, Imphal - 795 004
“Gramin Krishi Mausam Seva”

**MANIPUR BULLETIN****20th September, 2018****Ukhrul**

GKMS at AMFU- Lamphelpat, ICAR-RC Manipur Centre in association with India Meteorological Department, Regional Meteorological Centre, Guwahati and India Meteorological Department, New Delhi, Ministry of Earth Science, Govt. of India reports the weather forecasts for the next five days, i.e., from 21st to 25th September, 2018 as below:

Significant past weather for the preceding bi-weekly of Imphal - West (18th and 19th September, 2018)

Observed **14.0 mm** rainfall with **mainly cloudy to overcast sky**. Maximum temperature recorded ranged from **30.4 to 33.7 °C** and minimum of **21.7 to 21.9 °C** with mean relative humidity **91.0 %** max and **63.5 %** min was recorded in the past three days & average wind speed was **2.1– 2.6 km/ hr**.

Weather forecast for next five days of Ukhrul (21st to 25th September, 2018)

Likely to have thunderstorm accompanied with lightning at isolated places on Friday and mainly cloudy sky with maximum temp. **30-33 °C** & minimum temp. **20-22 °C**. Relative humidity may reach upto **98 %** (max RH) & **82 %** (min RH). The average wind speed may be **3-5 km/hr**.

Field Crops			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Rice	Milky and dough stage		- Maintain water level at 5-8 cm.
		Aphid, mealy bugs	Spray Fipronil @ 2g/15 litres or Imidachloprid 17.8 SL @ 7 ml/ 15 litres of water after rains.
		Plant Hoppers or Thrips	Spray Coragen 3-5 ml per 15 lit of water after rains at the early stage of infestation.
		Sheath blight/ Bakani	Carbendazim @ 30-40g/ 15 lit of water or Hexaconazole @ 15ml/ 15 lit of water after rains.
		Smut disease of rice	Kocide @ 5g/15lit water (spray after 2:00 pm only) to the crops in flowering stage after rains.
Soybean/ Groundnut	Fruiting to seed maturity		Weeding may be done if weed population is high after rains. Prepare wind breaks to avoid high speed winds.
Blackgram/ Rice Bean	Fruiting to seed maturity		Weeding may be done if weed population is high after rains. Prepare wind breaks to avoid high speed winds.
Seeds storage	Post-harvest management		For seed purpose store the seeds in RC-Seed Bin after proper drying and cleaning of seeds along with dry charcoal at 80:20 w/w ratios. Check for moisture content or weight of charcoal and dry if required. For grains, store grains in well ventilated godowns after drying properly. Spray Malathion 1% on the walls of stores.
Horticulture Crops			
* For nurseries, dip root in Carbendazim @ 10g/ 5 lit water for 30 min before transplanting in raised beds.			
* Wind breaks may be prepared for young plants of nursery in open fields.			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Tree bean	Trees above 7yrs age/ Bearing plants		Apply (60gm DAP + 10g MOP + 20g Carbofuran 3G / per plant.
Cauliflower	Vegetative stage of main season crop	Plutella Diamondback moth	- To kill early weeds shallow cultivation should be given using hoe or khurpi. - Check for infestation of Plutella Diamondback moth in young plants. If the plant is young then hand picking is advised otherwise neem based pesticides may be sprayed.
	nursery of late crop		- Raise late crop cauliflower nursery. - Sterilize nursery bed soil. Soil fumigation/ soil solarization may be done for both weeds and soil microbes. For this chemical or bioagents may be used as per choice. - Mix seeds with soil for better distribution of seeds while broadcasting and maintain a spacing of 2 inches between rows.
French Bean, Broad bean & Pea	Land preparation		- After harvesting of colocasia/ cucurbits, raised beds may now be prepared as for sowing of pea/ french bean/ broad bean. - Recommended varieties for French bean are – Pant Anupam, Anupam (to be planted at a spacing of 30cm x 45cm) and Tangkhul Hawai (local) (to be planted at a spacing of 30cm x 60cm with 2-3 seeds per hill). For broad bean, plant local variety at a spacing of 30cm x 45cm. And for pea, Arkel or Azad may be planted at a spacing of 10 cm x 30cm.
Ginger/ Turmeric	Rhizome initiation	Shoot borer	- Spray Nimbicidine @ 2-5ml/lit water.
Animal Sciences			



ICAR Research Complex for N.E.H. Region
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“Gramin Krishi Mausam Seva”



* Provide clean drinking water for birds and animals. Drainage may be constructed well around the birds or animals sheds to avoid water logging. * Check for the good condition of sheds of birds and animals.			
Name of bird/ animal	Stage	Disease and Management	Agro-meteorological advisories
Poultry (Chicken/ Duck)	All age groups	• Vaccination	• Vaccinate birds against Fowl Pox.
		• Deworming	• Deworming against Helminth parasites using Piperazine liquid @ 30-40ml for 100 birds in drinking water. Again give half of the dose on second day.
		• Contingency plan and management	Give ENROX liq. @ 2ml/ 10 kg body weight for 5 days. Give green grasses sufficiently & mix with ground maize/ rice bran. Add mineral mixture & vitamins either in feed or water or both. Start keeping new batch chicks in case of layer variety.
Sheep/ Goat	All age groups	• Vaccination	• If the animals are not vaccinated against F.M.D., B.Q., H.S., Enterotoxaemia, etc. do it in this month.
		• Fascioliosis	• Give Tolzan-F @ 15ml orally/ kg b. wt. It must be associated with vitamins like Livozyme @ 50ml twice daily.
		• Management	• Protect from thunder showers. Protect from after winds (loo). • Avoid flies by using Basil/ bouquets of Nirgundi or lemon grass by hanging.
Pig	All age groups except the young ones	• De-worming	• Deworming against Helminth parasites using Piperazine citrate @ 30 ml per adult animal once.
		• Coccidial infection (Diarrhea)	• Ofloxacin tab twice daily for 5 days.
		• Ticks	• Add Butox liquid @ 2 ml/ lit of water and use the solution twice a week while brushing the animal.
		• Vaccination	• Vaccinate against FMD.
		• Management	• Give mineral mixture like Vimicon and Ascagold suspension in pregnant sow @ 20g and 20ml resp. in feed.
Cattle	All age groups excepts the young ones	• Vaccination	• Vaccinate against B.Q., F.M.D. & H.S. if not yet vaccinated.
		• Deworming	• De-worm with Albomac suspension @ 60-90ml for 300kg body weight or 20-30ml for 100 kg body weight.
		• Endoparasite/ Ectoparasite	• Inject Ivomec @ 1 ml/ 50 kg body weight.
		• Care & Management	• Give mineral mixture @ 30-50g daily.
		• Milk fever	• Give 100-150ml of mixture calcium and phosphorous daily.

(I. Meghachandra Singh)
Scientist i/c, GKMS



ICAR Research Complex for N.E.H. Region
Manipur Centre, Lamphelpat, Imphal - 795 004
“Gramin Krishi Mausam Seva”

**MANIPUR BULLETIN****20th September, 2018****Bishnupur**

GKMS at AMFU- Lamphelpat, ICAR-RC Manipur Centre in association with India Meteorological Department, Regional Meteorological Centre, Guwahati and India Meteorological Department, New Delhi, Ministry of Earth Science, Govt. of India reports the weather forecasts for the next five days, i.e., from 21st to 25th September, 2018 as below:

Significant past weather for the preceding bi-weekly of Imphal - West (18th and 19th September, 2018)

Observed **14.0 mm** rainfall with **mainly cloudy to overcast sky**. Maximum temperature recorded ranged from **30.4 to 33.7 °C** and minimum of **21.7 to 21.9 °C** with mean relative humidity **91.0 %** max and **63.5 %** min was recorded in the past three days & average wind speed was **2.1– 2.6 km/ hr**.

Weather forecast for next five days of Bishnupur (21st to 25th September, 2018)

Likely to have thunderstorm accompanied with lightning at isolated places on Friday and mainly cloudy sky with maximum temp. **28-35 °C** & minimum temp. **22-24 °C**. Relative humidity may reach upto **100 %** (max RH) & **83 %** (min RH). The average wind speed may be **2-4 km/hr**.

Field Crops			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Rice	Milky and dough stage		- Maintain water level at 5-8 cm.
		Aphid, mealy bugs	Spray Fipronil @ 2g/15 litres or Imidachloprid 17.8 SL @ 7 ml/ 15 litres of water after rains.
		Plant Hoppers or Thrips	Spray Coragen 3-5 ml per 15 lit of water after rains at the early stage of infestation.
		Sheath blight/ Bakani	Carbendazim @ 30-40g/ 15 lit of water or Hexaconazole @ 15ml/ 15 lit of water after rains.
		Smut disease of rice	Kocide @ 5g/15lit water (spray after 2:00 pm only) to the crops in flowering stage after rains.
Soybean/ Groundnut	Fruiting to seed maturity		Weeding may be done if weed population is high after rains. Prepare wind breaks to avoid high speed winds.
Blackgram/ Rice Bean	Fruiting to seed maturity		Weeding may be done if weed population is high after rains. Prepare wind breaks to avoid high speed winds.
Seeds storage	Post-harvest management		For seed purpose store the seeds in RC-Seed Bin after proper drying and cleaning of seeds along with dry charcoal at 80:20 w/w ratios. Check for moisture content or weight of charcoal and dry if required. For grains, store grains in well ventilated godowns after drying properly. Spray Malathion 1% on the walls of stores.
Horticulture Crops			
* For nurseries, dip root in Carbendazim @ 10g/ 5 lit water for 30 min before transplanting in raised beds.			
* Wind breaks may be prepared for young plants of nursery in open fields.			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Rabi vegetables	Land preparation		Procure good quality seeds of carrot, raddish, coriander, cauliflower, cabbage, broccoli, etc. Prepare land for sowing or planting after rains.
Tree bean	Trees above 7yrs age/ Bearing plants		Apply (60gm DAP + 10g MOP + 20g Carbofuran 3G / per plant.
Cauliflower	Vegetative stage of main season crop	Plutella Diamondback moth	- To kill early weeds shallow cultivation should be given using hoe or khurpi. - Check for infestation of Plutella Diamondback moth in young plants. If the plant is young then hand picking is advised otherwise neem based pesticides may be sprayed.
	nursery of late crop		- Raise late crop cauliflower nursery. - Sterilize nursery bed soil. Soil fumigation/ soil solarization may be done for both weeds and soil microbes. For this chemical or bioagents may be used as per choice. - Mix seeds with soil for better distribution of seeds while broadcasting and maintain a spacing of 2 inches between rows.
Potato	Land preparation to planting		- Prepare land with fertile and sandy loam soil. Planting may be done after rains. Treat seeds before planting.
Onion	Nursery		Preparation for raising nursery (variety- Nasik Red) in slightly cooler and drier area in bright sunshine.



ICAR Research Complex for N.E.H. Region
Manipur Centre, Lamphelpat, Imphal - 795 004
“Gramin Krishi Mausam Seva”



French Bean, Broad bean & Pea	Land preparation		<ul style="list-style-type: none"> - After harvesting of colocasia/ cucurbits, raised beds may now be prepared as for sowing of pea/ french bean/ broad bean. - Recommended varieties for French bean are – Pant Anupam, Anupam (to be planted at a spacing of 30cm x 45cm) and Tangkhul Hawai (local) (to be planted at a spacing of 30cm x 60cm with 2-3 seeds per hill). For broad bean, plant local variety at a spacing of 30cm x 45cm. And for pea, Arkel or Azad may be planted at a spacing of 10 cm x 30cm.
Ginger/ Turmeric	Rhizome initiation	Shoot borer	<ul style="list-style-type: none"> - Spray Nimbecidine @ 2-5ml/lit water.

Animal Sciences

* Provide clean drinking water for birds and animals. Drainage may be constructed well around the birds or animals sheds to avoid water logging.

* Check for the good condition of sheds of birds and animals.

Name of bird/ animal	Stage	Disease and Management	Agro-meteorological advisories
Poultry (Chicken/ Duck)	All age groups	• Vaccination	• Vaccinate birds against Fowl Pox.
		• Deworming	• Deworming against Helminth parasites using Piperazine liquid @ 30-40ml for 100 birds in drinking water. Again give half of the dose on second day.
		• Contingency plan and management	Give ENROX liq. @ 2ml/ 10 kg body weight for 5 days. Give green grasses sufficiently & mix with ground maize/ rice bran. Add mineral mixture & vitamins either in feed or water or both. Start keeping new batch chicks in case of layer variety.
Sheep/ Goat	All age groups	• Vaccination	• If the animals are not vaccinated against F.M.D., B.Q., H.S., Enterotoxaemia, etc. do it in this month.
		• Fascioliosis	• Give Tolzan-F @ 15ml orally/ kg b. wt. It must be associated with vitamins like Livozyme @ 50ml twice daily.
		• Management	• Protect from thunder showers. Protect from after winds (loo). • Avoid flies by using Basil/ bouquets of Nirgundi or lemon grass by hanging.
Pig	All age groups except the young ones	• De-worming	• Deworming against Helminth parasites using Piperazine citrate @ 30 ml per adult animal once.
		• Coccidial infection (Diarrhea)	• Ofloxacin tab twice daily for 5 days.
		• Ticks	• Add Butox liquid @ 2 ml/ lit of water and use the solution twice a week while brushing the animal.
		• Vaccination	• Vaccinate against FMD.
		• Management	• Give mineral mixture like Vimicon and Ascagold suspension in pregnant sow @ 20g and 20ml resp. in feed.
Cattle	All age groups excepts the young ones	• Vaccination	• Vaccinate against B.Q., F.M.D. & H.S. if not yet vaccinated.
		• Deworming	• De-worm with Albomac suspension @ 60-90ml for 300kg body weight or 20-30ml for 100 kg body weight.
		• Endoparasite/ Ectoparasite	• Inject Ivomec @ 1 ml/ 50 kg body weight.
		• Care & Management	• Give mineral mixture @ 30-50g daily.
		• Milk fever	• Give 100-150ml of mixture calcium and phosphorous daily.

(I. Meghachandra Singh)
Scientist i/c, GKMS



ICAR Research Complex for N.E.H. Region
Manipur Centre, Lamphelpat, Imphal - 795 004
“Gramin Krishi Mausam Seva”

**MANIPUR BULLETIN****20th September, 2018**Chandel

GKMS at AMFU- Lamphelpat, ICAR-RC Manipur Centre in association with India Meteorological Department, Regional Meteorological Centre, Guwahati and India Meteorological Department, New Delhi, Ministry of Earth Science, Govt. of India reports the weather forecasts for the next five days, i.e., from 19th to 23rd September, 2018 as below:

Significant past weather for the preceding bi-weekly of Imphal - West (14th to 17th September, 2018)

Observed **0.2 mm** rainfall with **mainly clear to partly cloudy sky** but **mainly cloudy** during morning hours of 14th and 16th Sept. Maximum temperature recorded ranged from **31.3 to 32.7 °C** and minimum of **20.3 to 21.6 °C** with mean relative humidity **85.5 %** max and **59.0 %** min was recorded in the past three days & average wind speed was **2.1– 3.5 km/ hr.**

Weather forecast for next five days of Chandel (19th to 23rd September, 2018)

Likely to have thunderstorm accompanied with lightning at isolated places on Friday and mainly cloudy sky with maximum temp. **29-36 °C** & minimum temp. **22-25 °C**. Relative humidity may reach upto **99 %** (max RH) & **87 %** (min RH). The average wind speed may be **2-6 km/hr.**

Field Crops

Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Rice	Milky and dough stage		- Maintain water level at 5-8 cm.
		Aphid, mealy bugs	Spray Fipronil @ 2g/15 litres or Imidachloprid 17.8 SL @ 7 ml/ 15 litres of water after rains.
		Plant Hoppers or Thrips	Spray Coragen 3-5 ml per 15 lit of water after rains at the early stage of infestation.
		Sheath blight/ Bakani	Carbendazim @ 30-40g/ 15 lit of water or Hexaconazole @ 15ml/ 15 lit of water after rains.
		Smut disease of rice	Kocide @ 5g/15lit water (spray after 2:00 pm only) to the crops in flowering stage after rains.
Soybean/ Groundnut	Fruiting to seed maturity		Weeding may be done if weed population is high after rains. Prepare wind breaks to avoid high speed winds.
Blackgram/ Rice Bean	Fruiting to seed maturity		Weeding may be done if weed population is high after rains. Prepare wind breaks to avoid high speed winds.
Seeds storage	Post-harvest management		For seed purpose store the seeds in RC-Seed Bin after proper drying and cleaning of seeds along with dry charcoal at 80:20 w/w ratios. Check for moisture content or weight of charcoal and dry if required. For grains, store grains in well ventilated godowns after drying properly. Spray Malathion 1% on the walls of stores.

Horticulture Crops

* For nurseries, dip root in Carbendazim @ 10g/ 5 lit water for 30 min before transplanting in raised beds.

* Wind breaks may be prepared for young plants of nursery in open fields.

Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Rabi vegetables	Land preparation		Procure good quality seeds of carrot, raddish, coriander, cauliflower, cabbage, broccoli, etc. Prepare land for sowing or planting after rains.
Tree bean	Trees above 7yrs age/ Bearing plants		Apply (60gm DAP + 10g MOP + 20g Carbofuran 3G / per plant.
Cauliflower	Vegetative stage of main season crop	Plutella Diamondback moth	- To kill early weeds shallow cultivation should be given using hoe or khurpi. - Check for infestation of Plutella Diamondback moth in young plants. If the plant is young then hand picking is advised otherwise neem based pesticides may be sprayed.
	nursery of late crop		- Raise late crop cauliflower nursery. - Sterilize nursery bed soil. Soil fumigation/ soil solarization may be done for both weeds and soil microbes. For this chemical or bioagents may be used as per choice. - Mix seeds with soil for better distribution of seeds while broadcasting and maintain a spacing of 2 inches between rows.
Potato	Land preparation to planting		- Prepare land with fertile and sandy loam soil. Planting may be done after rains. Treat seeds before planting.
Onion	Nursery		Preparation for raising nursery (variety- Nasik Red) in slightly cooler and drier area in bright sunshine.



ICAR Research Complex for N.E.H. Region
Manipur Centre, Lamphelpat, Imphal - 795 004
“Gramin Krishi Mausam Seva”



French Bean, Broad bean & Pea	Land preparation		<ul style="list-style-type: none"> - After harvesting of colocasia/ cucurbits, raised beds may now be prepared as for sowing of pea/ french bean/ broad bean. - Recommended varieties for French bean are – Pant Anupam, Anupam (to be planted at a spacing of 30cm x 45cm) and Tangkhul Hawai (local) (to be planted at a spacing of 30cm x 60cm with 2-3 seeds per hill). For broad bean, plant local variety at a spacing of 30cm x 45cm. And for pea, Arkel or Azad may be planted at a spacing of 10 cm x 30cm.
Ginger/ Turmeric	Rhizome initiation	Shoot borer	<ul style="list-style-type: none"> - Spray Nimbecidine @ 2-5ml/lit water.
Animal Sciences			
* Provide clean drinking water for birds and animals. Drainage may be constructed well around the birds or animals sheds to avoid water logging. * Check for the good condition of sheds of birds and animals.			
Name of bird/ animal	Stage	Disease and Management	Agro-meteorological advisories
Poultry (Chicken/ Duck)	All age groups	• Vaccination	• Vaccinate birds against Fowl Pox.
		• Deworming	• Deworming against Helminth parasites using Piperazine liquid @ 30-40ml for 100 birds in drinking water. Again give half of the dose on second day.
		• Contingency plan and management	Give ENROX liq. @ 2ml/ 10 kg body weight for 5 days. Give green grasses sufficiently & mix with ground maize/ rice bran. Add mineral mixture & vitamins either in feed or water or both. Start keeping new batch chicks in case of layer variety.
Sheep/ Goat	All age groups	• Vaccination	• If the animals are not vaccinated against F.M.D., B.Q., H.S., Enterotoxaemia, etc. do it in this month.
		• Fascioliosis	• Give Tolzan-F @ 15ml orally/ kg b. wt. It must be associated with vitamins like Livozyme @ 50ml twice daily.
		• Management	• Protect from thunder showers. Protect from after winds (loo). • Avoid flies by using Basil/ bouquets of Nirgundi or lemon grass by hanging.
Pig	All age groups except the young ones	• De-worming	• Deworming against Helminth parasites using Piperazine citrate @ 30 ml per adult animal once.
		• Coccidial infection (Diarrhea)	• Ofloxacin tab twice daily for 5 days.
		• Ticks	• Add Butox liquid @ 2 ml/ lit of water and use the solution twice a week while brushing the animal.
		• Vaccination	• Vaccinate against FMD.
		• Management	• Give mineral mixture like Vimicon and Ascagold suspension in pregnant sow @ 20g and 20ml resp. in feed.
Cattle	All age groups excepts the young ones	• Vaccination	• Vaccinate against B.Q., F.M.D. & H.S. if not yet vaccinated.
		• Deworming	• De-worm with Albomac suspension @ 60-90ml for 300kg body weight or 20-30ml for 100 kg body weight.
		• Endoparasite/ Ectoparasite	• Inject Ivomec @ 1 ml/ 50 kg body weight.
		• Care & Management	• Give mineral mixture @ 30-50g daily.
		• Milk fever	• Give 100-150ml of mixture calcium and phosphorous daily.

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ICAR Research Complex for N.E.H. Region
Manipur Centre, Lamphelpat, Imphal - 795 004
“Gramin Krishi Mausam Seva”

**MANIPUR BULLETIN****20th September, 2018****Churachandpur**

GKMS at AMFU- Lamphelpat, ICAR-RC Manipur Centre in association with India Meteorological Department, Regional Meteorological Centre, Guwahati and India Meteorological Department, New Delhi, Ministry of Earth Science, Govt. of India reports the weather forecasts for the next five days, i.e., from 21st to 25th September, 2018 as below:

Significant past weather for the preceding bi-weekly of Imphal - West (18th and 19th September, 2018)

Observed **14.0 mm** rainfall with **mainly cloudy to overcast sky**. Maximum temperature recorded ranged from **30.4 to 33.7 °C** and minimum of **21.7 to 21.9 °C** with mean relative humidity **91.0 %** max and **63.5 %** min was recorded in the past three days & average wind speed was **2.1– 2.6 km/ hr**.

Weather forecast for next five days of Churachandpur (21st to 25th September, 2018)

Likely to have thunderstorm accompanied with lightning at isolated places on Friday and mainly cloudy sky with maximum temp. **29-36 °C** & minimum temp. **22-25 °C**. Relative humidity may reach upto **99 %** (max RH) & **87 %** (min RH). The average wind speed may be **2-6 km/hr**.

Field Crops			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Rice	Milky and dough stage		- Maintain water level at 5-8 cm.
		Aphid, mealy bugs	Spray Fipronil @ 2g/15 litres or Imidachloprid 17.8 SL @ 7 ml/ 15 litres of water after rains.
		Plant Hoppers or Thrips	Spray Coragen 3-5 ml per 15 lit of water after rains at the early stage of infestation.
		Sheath blight/ Bakani	Carbendazim @ 30-40g/ 15 lit of water or Hexaconazole @ 15ml/ 15 lit of water after rains.
		Smut disease of rice	Kocide @ 5g/15lit water (spray after 2:00 pm only) to the crops in flowering stage after rains.
Soybean/ Groundnut	Fruiting to seed maturity		Weeding may be done if weed population is high after rains. Prepare wind breaks to avoid high speed winds.
Blackgram/ Rice Bean	Fruiting to seed maturity		Weeding may be done if weed population is high after rains. Prepare wind breaks to avoid high speed winds.
Seeds storage	Post-harvest management		For seed purpose store the seeds in RC-Seed Bin after proper drying and cleaning of seeds along with dry charcoal at 80:20 w/w ratios. Check for moisture content or weight of charcoal and dry if required. For grains, store grains in well ventilated godowns after drying properly. Spray Malathion 1% on the walls of stores.
Horticulture Crops			
* For nurseries, dip root in Carbendazim @ 10g/ 5 lit water for 30 min before transplanting in raised beds.			
* Wind breaks may be prepared for young plants of nursery in open fields.			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Rabi vegetables	Land preparation		Procure good quality seeds of carrot, raddish, coriander, cauliflower, cabbage, broccoli, etc. Prepare land for sowing or planting after rains.
Tree bean	Trees above 7yrs age/ Bearing plants		Apply (60gm DAP + 10g MOP + 20g Carbofuran 3G / per plant.
Cauliflower	Vegetative stage of main season crop	Plutella Diamondback moth	- To kill early weeds shallow cultivation should be given using hoe or khurpi. - Check for infestation of Plutella Diamondback moth in young plants. If the plant is young then hand picking is advised otherwise neem based pesticides may be sprayed.
	nursery of late crop		- Raise late crop cauliflower nursery. - Sterilize nursery bed soil. Soil fumigation/ soil solarization may be done for both weeds and soil microbes. For this chemical or bioagents may be used as per choice. - Mix seeds with soil for better distribution of seeds while broadcasting and maintain a spacing of 2 inches between rows.
Potato	Land preparation to planting		- Prepare land with fertile and sandy loam soil. Planting may be done after rains. Treat seeds before planting.
Onion	Nursery		Preparation for raising nursery (variety- Nasik Red) in slightly cooler and drier area in bright sunshine.



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French Bean, Broad bean & Pea	Land preparation		<ul style="list-style-type: none"> - After harvesting of colocasia/ cucurbits, raised beds may now be prepared as for sowing of pea/ french bean/ broad bean. - Recommended varieties for French bean are – Pant Anupam, Anupam (to be planted at a spacing of 30cm x 45cm) and Tangkhul Hawai (local) (to be planted at a spacing of 30cm x 60cm with 2-3 seeds per hill). For broad bean, plant local variety at a spacing of 30cm x 45cm. And for pea, Arkel or Azad may be planted at a spacing of 10 cm x 30cm.
Ginger/ Turmeric	Rhizome initiation	Shoot borer	<ul style="list-style-type: none"> - Spray Nimbecidine @ 2-5ml/lit water.
Animal Sciences			
* Provide clean drinking water for birds and animals. Drainage may be constructed well around the birds or animals sheds to avoid water logging. * Check for the good condition of sheds of birds and animals.			
Name of bird/ animal	Stage	Disease and Management	Agro-meteorological advisories
Poultry (Chicken/ Duck)	All age groups	• Vaccination	• Vaccinate birds against Fowl Pox.
		• Deworming	• Deworming against Helminth parasites using Piperazine liquid @ 30-40ml for 100 birds in drinking water. Again give half of the dose on second day.
		• Contingency plan and management	Give ENROX liq. @ 2ml/ 10 kg body weight for 5 days. Give green grasses sufficiently & mix with ground maize/ rice bran. Add mineral mixture & vitamins either in feed or water or both. Start keeping new batch chicks in case of layer variety.
Sheep/ Goat	All age groups	• Vaccination	• If the animals are not vaccinated against F.M.D., B.Q., H.S., Enterotoxaemia, etc. do it in this month.
		• Fascioliosis	• Give Tolzan-F @ 15ml orally/ kg b. wt. It must be associated with vitamins like Livozyme @ 50ml twice daily.
		• Management	• Protect from thunder showers. Protect from after winds (loo). • Avoid flies by using Basil/ bouquets of Nirgundi or lemon grass by hanging.
Pig	All age groups except the young ones	• De-worming	• Deworming against Helminth parasites using Piperazine citrate @ 30 ml per adult animal once.
		• Coccidial infection (Diarrhea)	• Ofloxacin tab twice daily for 5 days.
		• Ticks	• Add Butox liquid @ 2 ml/ lit of water and use the solution twice a week while brushing the animal.
		• Vaccination	• Vaccinate against FMD.
		• Management	• Give mineral mixture like Vimicon and Ascagold suspension in pregnant sow @ 20g and 20ml resp. in feed.
Cattle	All age groups excepts the young ones	• Vaccination	• Vaccinate against B.Q., F.M.D. & H.S. if not yet vaccinated.
		• Deworming	• De-worm with Albomac suspension @ 60-90ml for 300kg body weight or 20-30ml for 100 kg body weight.
		• Endoparasite/ Ectoparasite	• Inject Ivomec @ 1 ml/ 50 kg body weight.
		• Care & Management	• Give mineral mixture @ 30-50g daily.
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