



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



MANIPUR BULLETIN

4th 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 5th to 9th September, 2018 as below:

<p>Significant past weather for the preceding bi-weekly of Imphal - West (31st August to 3rd September, 2018) Observed 11.4 mm rainfall with mainly cloudy to overcast sky but Mainly Clear during morning hours of 31st Aug. Maximum temperature recorded ranged from 28.0 to 32.2 °C and minimum of 20.7 to 23.0 °C with mean relative humidity 93.8 % max and 71.3 % min was recorded in the past three days & average wind speed was 1.8 – 4.4 km/ hr.</p>	<p>Weather forecast for next five days of Bishnupur (5th to 9th September, 2018) Likely to have light to moderate rains on Wednesday then no rain thereafter during next five days and partly cloudy to mainly cloudy sky with maximum temp. 31-32 °C & minimum temp. 22-24 °C. Relative humidity may reach upto 99 % (max RH) & 80 % (min RH). The average wind speed may be 2-4 km/hr.</p>
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<i>Field Crops</i>			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Rice	Panicle Initiation to flowering	Leaf folder	- Maintain water level at 5-8 cm. Spray Thiomethoxam @ 5g/ 15 lit of water.
		Case worm, Stem Borer/ Gall midge/Plant Hoppers or Thrips	Spray Coragen 3-5 ml per 15 lit of water at the early stage of infestation.
		Any sucking insect	Imidachloprid @ 8ml/ 15 litres of water.
Soybean/ Groundnut	Fruiting to seed maturity	Hairy caterpillars	- Avoid water logging. - For control of hairy caterpillars, dust 5% Malathion @ 20 kg/ ha to control it or spray Dichlorovos 76 EC 0.05% (0.6ml/ lit of water).
		Tikka disease in groundnut	- Spray Carbendazim @ 0.5g / lit of water to control Tikka disease in groundnut.
		Rust in soybean	- Prune or stake plants and remove weeds to improve air circulation and use a thick layer of mulch or organic compost to cover the soil. - Apply copper sprays or sulfur powders or bio-fungicide to prevent infection of susceptible plants.
Blackgram/ Rice Bean	Fruiting to seed maturity		- Avoid water logging. - Spray Dichlorovos 76 EC 0.05% (0.6ml/ lit of water) against hairy caterpillars.
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.

<i>Horticulture Crops</i>			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Fruit plants (Mango, Litchi, guava)	Nursery/ planting		Procure seedlings/ planting material of good strains of Mango, Litchi and Guava from reliable source. Select foothills/ hill slope areas for establishment of new orchards. For planting, make pit size of 1x1x1 foot.
French Bean, Broad bean & Pea	Land preparation		Land preparation for sowing of french bean, broad bean and pea may be done. Recommended varieties for French bean are – Pant Anupam, Anupam (to be planted at a spacing of 30cm x 45cm) and Tangkhul Hawai (local) (to be planted at a spacing of 30cm x 60cm with 2-3 seeds per hill). For broad bean, plant local variety at a spacing of 30cm x 45cm. And for pea, Arkel or Azad may be planted at a spacing of 10 cm x 30cm.
Cauliflower	Curd formation stage of early crop		- Weeding may be done.
	transplanting of main season crop		- Light watering during morning hours may be done till the plants get established.
	nursery of late crop		- Raise late crop cauliflower nursery.
Potato	Land preparation		- Select the area with fertile and sandy loam soil. Land preparation for planting potato for early crop and also for production of seed may be started in foothills and upland area.



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Ginger/ Turmeric	Rhizome initiation		- Apply Phosphate solubilizing bacteria @ 3-5kg/ acre (1.6 sangam) with compost in soil as bio-fertilizer. - Avoid water logging in and around the crop field.
Orange	Nursery	Leaf Miner	- Spray Prophenophos + Cypermethrin (Rocket) @2.5 ml/lit of water at 10 days interval.

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.

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.
		• Management	• Do not allow to <i>consume muddy water to protect from E.coli infection. Use water sanitizer.</i>
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

4th 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 5th to 9th September, 2018 as below:

<p>Significant past weather for the preceding bi-weekly of Imphal - West (31st August to 3rd September, 2018) Observed 11.4 mm rainfall with mainly cloudy to overcast sky but Mainly Clear during morning hours of 31st Aug. Maximum temperature recorded ranged from 28.0 to 32.2 °C and minimum of 20.7 to 23.0 °C with mean relative humidity 93.8 % max and 71.3 % min was recorded in the past three days & average wind speed was 1.8 – 4.4 km/ hr.</p>	<p>Weather forecast for next five days of Chandel (5th to 9th September, 2018) Likely to have light to moderate rains on Wednesday then no rain thereafter during next five days and partly cloudy to mainly cloudy sky with maximum temp. 31-32 °C & minimum temp. 22-24 °C. Relative humidity may reach upto 99 % (max RH) & 70 % (min RH). The average wind speed may be 2-3 km/hr.</p>
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<i>Field Crops</i>			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Rice	Panicle Initiation to flowering	Leaf folder	- Maintain water level at 5-8 cm. Spray Thiomethoxam @ 5g/ 15 lit of water.
		Case worm, Stem Borer/ Gall midge/Plant Hoppers or Thrips	Spray Coragen 3-5 ml per 15 lit of water at the early stage of infestation.
		Any sucking insect	Imidachloprid @ 8ml/ 15 litres of water.
Soybean/ Groundnut	Fruiting to seed maturity	Hairy caterpillars	- Avoid water logging. - For control of hairy caterpillars, dust 5% Malathion @ 20 kg/ ha to control it or spray Dichlorovos 76 EC 0.05% (0.6ml/ lit of water).
		Tikka disease in groundnut	- Spray Carbendazim @ 0.5g / lit of water to control Tikka disease in groundnut.
		Rust in soybean	- Prune or stake plants and remove weeds to improve air circulation and use a thick layer of mulch or organic compost to cover the soil. - Apply copper sprays or sulfur powders or bio-fungicide to prevent infection of susceptible plants.
Blackgram/ Rice Bean	Fruiting to seed maturity		- Avoid water logging. - Spray Dichlorovos 76 EC 0.05% (0.6ml/ lit of water) against hairy caterpillars.
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.

<i>Horticulture Crops</i>			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Fruit plants (Mango, Litchi, guava)	Nursery/ planting		Procure seedlings/ planting material of good strains of Mango, Litchi and Guava from reliable source. Select foothills/ hill slope areas for establishment of new orchards. For planting, make pit size of 1x1x1 foot.
French Bean, Broad bean & Pea	Land preparation		Land preparation for sowing of french bean, broad bean and pea may be done. Recommended varieties for French bean are – Pant Anupam, Anupam (to be planted at a spacing of 30cm x 45cm) and Tangkhul Hawai (local) (to be planted at a spacing of 30cm x 60cm with 2-3 seeds per hill). For broad bean, plant local variety at a spacing of 30cm x 45cm. And for pea, Arkel or Azad may be planted at a spacing of 10 cm x 30cm.
Cauliflower	Curd formation stage of early crop		- Weeding may be done.
	transplanting of main season crop		- Light watering during morning hours may be done till the plants get established.
	nursery of late crop		- Raise late crop cauliflower nursery.
Potato	Land preparation		- Select the area with fertile and sandy loam soil. Land preparation for planting potato for early crop and also for production of seed may be started in foothills and upland area.



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Ginger/ Turmeric	Rhizome initiation		- Apply Phosphate solubilizing bacteria @ 3-5kg/ acre (1.6 sangam) with compost in soil as bio-fertilizer. - Avoid water logging in and around the crop field.
Orange	Nursery	Leaf Miner	- Spray Prophenophos + Cypermethrin (Rocket) @2.5 ml/lit of water at 10 days interval.

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.

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.
		• Management	• Do not allow to <i>consume muddy water to protect from E.coli infection. Use water sanitizer.</i>
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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MANIPUR BULLETIN

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Churachandpur

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<p>Significant past weather for the preceding bi-weekly of Imphal - West (31st August to 3rd September, 2018) Observed 11.4 mm rainfall with mainly cloudy to overcast sky but Mainly Clear during morning hours of 31st Aug. Maximum temperature recorded ranged from 28.0 to 32.2 °C and minimum of 20.7 to 23.0 °C with mean relative humidity 93.8 % max and 71.3 % min was recorded in the past three days & average wind speed was 1.8 – 4.4 km/ hr.</p>	<p>Weather forecast for next five days of Churachandpur (5th to 9th September, 2018) Likely to have light to moderate rains on Wednesday then no rain thereafter during next five days and partly cloudy to mainly cloudy sky with maximum temp. 31-32 °C & minimum temp. 22-24 °C. Relative humidity may reach upto 99 % (max RH) & 73 % (min RH). The average wind speed may be 2-3 km/hr.</p>
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<i>Field Crops</i>			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Rice	Panicle Initiation to flowering	Leaf folder	- Maintain water level at 5-8 cm. Spray Thiomethoxam @ 5g/ 15 lit of water.
		Case worm, Stem Borer/ Gall midge/Plant Hoppers or Thrips	Spray Coragen 3-5 ml per 15 lit of water at the early stage of infestation.
		Any sucking insect	Imidachloprid @ 8ml/ 15 litres of water.
Soybean/ Groundnut	Fruiting to seed maturity	Hairy caterpillars	- Avoid water logging. - For control of hairy caterpillars, dust 5% Malathion @ 20 kg/ ha to control it or spray Dichlorovos 76 EC 0.05% (0.6ml/ lit of water).
		Tikka disease in groundnut	- Spray Carbendazim @ 0.5g / lit of water to control Tikka disease in groundnut.
		Rust in soybean	- Prune or stake plants and remove weeds to improve air circulation and use a thick layer of mulch or organic compost to cover the soil. - Apply copper sprays or sulfur powders or bio-fungicide to prevent infection of susceptible plants.
Blackgram/ Rice Bean	Fruiting to seed maturity		- Avoid water logging. - Spray Dichlorovos 76 EC 0.05% (0.6ml/ lit of water) against hairy caterpillars.
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.

<i>Horticulture Crops</i>			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Fruit plants (Mango, Litchi, guava)	Nursery/ planting		Procure seedlings/ planting material of good strains of Mango, Litchi and Guava from reliable source. Select foothills/ hill slope areas for establishment of new orchards. For planting, make pit size of 1x1x1 foot.
French Bean, Broad bean & Pea	Land preparation		Land preparation for sowing of french bean, broad bean and pea may be done. Recommended varieties for French bean are – Pant Anupam, Anupam (to be planted at a spacing of 30cm x 45cm) and Tangkhul Hawai (local) (to be planted at a spacing of 30cm x 60cm with 2-3 seeds per hill). For broad bean, plant local variety at a spacing of 30cm x 45cm. And for pea, Arkel or Azad may be planted at a spacing of 10 cm x 30cm.
Cauliflower	Curd formation stage of early crop		- Weeding may be done.
	transplanting of main season crop		- Light watering during morning hours may be done till the plants get established.
	nursery of late crop		- Raise late crop cauliflower nursery.
Potato	Land preparation		- Select the area with fertile and sandy loam soil. Land preparation for planting potato for early crop and also for production of seed may be started in foothills and upland area.



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Ginger/ Turmeric	Rhizome initiation		- Apply Phosphate solubilizing bacteria @ 3-5kg/ acre (1.6 sangam) with compost in soil as bio-fertilizer. - Avoid water logging in and around the crop field.
Orange	Nursery	Leaf Miner	- Spray Prophenophos + Cypermethrin (Rocket) @2.5 ml/lit of water at 10 days interval.

Animal Sciences

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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.
		• Management	• Do not allow to <i>consume muddy water to protect from E.coli infection. Use water sanitizer.</i>
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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MANIPUR BULLETIN

4th 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 5th to 9th September, 2018 as below:

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		Any sucking insect	Imidachloprid @ 8ml/ 15 litres of water.
Soybean/ Groundnut	Fruiting to seed maturity	Hairy caterpillars	- Avoid water logging. - For control of hairy caterpillars, dust 5% Malathion @ 20 kg/ ha to control it or spray Dichlorovos 76 EC 0.05% (0.6ml/ lit of water).
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Orange	Nursery	Leaf Miner	- Spray Prophenophos + Cypermethrin (Rocket) @2.5 ml/lit of water at 10 days interval.

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 Scientist i/c, GKMS



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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 5th to 9th September, 2018 as below:

<p>Significant past weather for the preceding bi-weekly of Imphal - West (31st August to 3rd September, 2018) Observed 11.4 mm rainfall with mainly cloudy to overcast sky but Mainly Clear during morning hours of 31st Aug. Maximum temperature recorded ranged from 28.0 to 32.2 °C and minimum of 20.7 to 23.0 °C with mean relative humidity 93.8 % max and 71.3 % min was recorded in the past three days & average wind speed was 1.8 – 4.4 km/ hr.</p>	<p>Weather forecast for next five days of Imphal West (5th to 9th September, 2018) Likely to have light to moderate rains on Wednesday then no rain thereafter during next five days and partly cloudy to mainly cloudy sky with maximum temp. 31-32 °C & minimum temp. 22-24 °C. Relative humidity may reach upto 99 % (max RH) & 62 % (min RH). The average wind speed may be 0-2 km/hr.</p>
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<i>Field Crops</i>			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Rice	Panicle Initiation to flowering	Leaf folder	- Maintain water level at 5-8 cm. Spray Thiomethoxam @ 5g/ 15 lit of water.
		Case worm, Stem Borer/ Gall midge/Plant Hoppers or Thrips	Spray Coragen 3-5 ml per 15 lit of water at the early stage of infestation.
		Any sucking insect	Imidachloprid @ 8ml/ 15 litres of water.
Soybean/ Groundnut	Fruiting to seed maturity	Hairy caterpillars	- Avoid water logging. - For control of hairy caterpillars, dust 5% Malathion @ 20 kg/ ha to control it or spray Dichlorovos 76 EC 0.05% (0.6ml/ lit of water).
		Tikka disease in groundnut	- Spray Carbendazim @ 0.5g / lit of water to control Tikka disease in groundnut.
		Rust in soybean	- Prune or stake plants and remove weeds to improve air circulation and use a thick layer of mulch or organic compost to cover the soil. - Apply copper sprays or sulfur powders or bio-fungicide to prevent infection of susceptible plants.
Blackgram/ Rice Bean	Fruiting to seed maturity		- Avoid water logging. - Spray Dichlorovos 76 EC 0.05% (0.6ml/ lit of water) against hairy caterpillars.
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.

<i>Horticulture Crops</i>			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Fruit plants (Mango, Litchi, guava)	Nursery/ planting		Procure seedlings/ planting material of good strains of Mango, Litchi and Guava from reliable source. Select foothills/ hill slope areas for establishment of new orchards. For planting, make pit size of 1x1x1 foot.
French Bean, Broad bean & Pea	Land preparation		Land preparation for sowing of french bean, broad bean and pea may be done. Recommended varieties for French bean are – Pant Anupam, Anupam (to be planted at a spacing of 30cm x 45cm) and Tangkhul Hawai (local) (to be planted at a spacing of 30cm x 60cm with 2-3 seeds per hill). For broad bean, plant local variety at a spacing of 30cm x 45cm. And for pea, Arkel or Azad may be planted at a spacing of 10 cm x 30cm.
Cauliflower	Curd formation stage of early crop		- Weeding may be done.
	transplanting of main season crop		- Light watering during morning hours may be done till the plants get established.
	nursery of late crop		- Raise late crop cauliflower nursery.
Potato	Land preparation		- Select the area with fertile and sandy loam soil. Land preparation for planting potato for early crop and also for production of seed may be started in foothills and upland area.



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



Ginger/ Turmeric	Rhizome initiation		- Apply Phosphate solubilizing bacteria @ 3-5kg/ acre (1.6 sangam) with compost in soil as bio-fertilizer. - Avoid water logging in and around the crop field.
Orange	Nursery	Leaf Miner	- Spray Prophenophos + Cypermethrin (Rocket) @2.5 ml/lit of water at 10 days interval.

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.

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.
		• Management	• Do not allow to <i>consume muddy water to protect from E.coli infection. Use water sanitizer.</i>
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

4th 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 5th to 9th September, 2018 as below:

<p>Significant past weather for the preceding bi-weekly of Imphal - West (31st August to 3rd September, 2018) Observed 11.4 mm rainfall with mainly cloudy to overcast sky but Mainly Clear during morning hours of 31st Aug. Maximum temperature recorded ranged from 28.0 to 32.2 °C and minimum of 20.7 to 23.0 °C with mean relative humidity 93.8 % max and 71.3 % min was recorded in the past three days & average wind speed was 1.8 – 4.4 km/ hr.</p>	<p>Weather forecast for next five days of Senapati (5th to 9th September, 2018) Likely to have light to moderate rains on Wednesday then no rain thereafter during next five days and partly cloudy to mainly cloudy sky with maximum temp. 26-28 °C & minimum temp. 19-20 °C. Relative humidity may reach upto 99 % (max RH) & 77 % (min RH). The average wind speed may be 2-3 km/hr.</p>
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<i>Field Crops</i>			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Rice	Panicle Initiation to flowering	Leaf folder	- Maintain water level at 5-8 cm. Spray Thiomethoxam @ 5g/ 15 lit of water.
		Case worm, Stem Borer/ Gall midge/Plant Hoppers or Thrips	Spray Coragen 3-5 ml per 15 lit of water at the early stage of infestation.
		Any sucking insect	Imidachloprid @ 8ml/ 15 litres of water.
Soybean/ Groundnut	Fruiting to seed maturity	Hairy caterpillars	- Avoid water logging. - For control of hairy caterpillars, dust 5% Malathion @ 20 kg/ ha to control it or spray Dichlorovos 76 EC 0.05% (0.6ml/ lit of water).
		Tikka disease in groundnut	- Spray Carbendazim @ 0.5g / lit of water to control Tikka disease in groundnut.
		Rust in soybean	- Prune or stake plants and remove weeds to improve air circulation and use a thick layer of mulch or organic compost to cover the soil. - Apply copper sprays or sulfur powders or bio-fungicide to prevent infection of susceptible plants.
Blackgram/ Rice Bean	Fruiting to seed maturity		- Avoid water logging. - Spray Dichlorovos 76 EC 0.05% (0.6ml/ lit of water) against hairy caterpillars.
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.

<i>Horticulture Crops</i>			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Fruit plants (Mango, Litchi, guava)	Nursery/ planting		Procure seedlings/ planting material of good strains of Mango, Litchi and Guava from reliable source. Select foothills/ hill slope areas for establishment of new orchards. For planting, make pit size of 1x1x1 foot.
French Bean, Broad bean & Pea	Land preparation		Land preparation for sowing of french bean, broad bean and pea may be done. Recommended varieties for French bean are – Pant Anupam, Anupam (to be planted at a spacing of 30cm x 45cm) and Tangkhul Hawai (local) (to be planted at a spacing of 30cm x 60cm with 2-3 seeds per hill). For broad bean, plant local variety at a spacing of 30cm x 45cm. And for pea, Arkel or Azad may be planted at a spacing of 10 cm x 30cm.
Cauliflower	Curd formation stage of early crop		- Weeding may be done.
	transplanting of main season crop		- Light watering during morning hours may be done till the plants get established.
	nursery of late crop		- Raise late crop cauliflower nursery.
Ginger/ Turmeric	Rhizome initiation		- Apply Phosphate solubilizing bacteria @ 3-5kg/ acre (1.6 sangam) with compost in soil as bio-fertilizer. - Avoid water logging in and around the crop field.



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



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.			
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.
		• Management	• Do not allow to <i>consume muddy water to protect from E.coli infection. Use water sanitizer.</i>
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

4th 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 5th to 9th September, 2018 as below:

<p>Significant past weather for the preceding bi-weekly of Imphal - West (31st August to 3rd September, 2018) Observed 11.4 mm rainfall with mainly cloudy to overcast sky but Mainly Clear during morning hours of 31st Aug. Maximum temperature recorded ranged from 28.0 to 32.2 °C and minimum of 20.7 to 23.0 °C with mean relative humidity 93.8 % max and 71.3 % min was recorded in the past three days & average wind speed was 1.8 – 4.4 km/ hr.</p>	<p>Weather forecast for next five days of Tamenglong (5th to 9th September, 2018) Likely to have light to moderate rains on Wednesday then no rain thereafter during next five days and partly cloudy to mainly cloudy sky with maximum temp. 26-28 °C & minimum temp. 19-20 °C. Relative humidity may reach upto 99 % (max RH) & 76 % (min RH). The average wind speed may be 2-3 km/hr.</p>
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<i>Field Crops</i>			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Rice	Panicle Initiation to flowering	Leaf folder	- Maintain water level at 5-8 cm. Spray Thiomethoxam @ 5g/ 15 lit of water.
		Case worm, Stem Borer/ Gall midge/Plant Hoppers or Thrips	Spray Coragen 3-5 ml per 15 lit of water at the early stage of infestation.
		Any sucking insect	Imidachloprid @ 8ml/ 15 litres of water.
Soybean/ Groundnut	Fruiting to seed maturity	Hairy caterpillars	- Avoid water logging. - For control of hairy caterpillars, dust 5% Malathion @ 20 kg/ ha to control it or spray Dichlorovos 76 EC 0.05% (0.6ml/ lit of water).
		Tikka disease in groundnut	- Spray Carbendazim @ 0.5g / lit of water to control Tikka disease in groundnut.
		Rust in soybean	- Prune or stake plants and remove weeds to improve air circulation and use a thick layer of mulch or organic compost to cover the soil. - Apply copper sprays or sulfur powders or bio-fungicide to prevent infection of susceptible plants.
Blackgram/ Rice Bean	Fruiting to seed maturity		- Avoid water logging. - Spray Dichlorovos 76 EC 0.05% (0.6ml/ lit of water) against hairy caterpillars.
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.

<i>Horticulture Crops</i>			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Fruit plants (Mango, Litchi, guava)	Nursery/ planting		Procure seedlings/ planting material of good strains of Mango, Litchi and Guava from reliable source. Select foothills/ hill slope areas for establishment of new orchards. For planting, make pit size of 1x1x1 foot.
French Bean, Broad bean & Pea	Land preparation		Land preparation for sowing of french bean, broad bean and pea may be done. Recommended varieties for French bean are – Pant Anupam, Anupam (to be planted at a spacing of 30cm x 45cm) and Tangkhul Hawai (local) (to be planted at a spacing of 30cm x 60cm with 2-3 seeds per hill). For broad bean, plant local variety at a spacing of 30cm x 45cm. And for pea, Arkel or Azad may be planted at a spacing of 10 cm x 30cm.
Cauliflower	Curd formation stage of early crop		- Weeding may be done.
	transplanting of main season crop		- Light watering during morning hours may be done till the plants get established.
	nursery of late crop		- Raise late crop cauliflower nursery.
Potato	Land preparation		- Select the area with fertile and sandy loam soil. Land preparation for planting potato for early crop and also for production of seed may be started in foothills and upland area.



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



Ginger/ Turmeric	Rhizome initiation		- Apply Phosphate solubilizing bacteria @ 3-5kg/ acre (1.6 sangam) with compost in soil as bio-fertilizer. - Avoid water logging in and around the crop field.
Orange	Nursery	Leaf Miner	- Spray Prophenophos + Cypermethrin (Rocket) @2.5 ml/lit of water at 10 days interval.

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.

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.
		• Management	• Do not allow to <i>consume muddy water to protect from E.coli infection. Use water sanitizer.</i>
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

4th 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 5th to 9th September, 2018 as below:

<p>Significant past weather for the preceding bi-weekly of Imphal - West (31st August to 3rd September, 2018) Observed 11.4 mm rainfall with mainly cloudy to overcast sky but Mainly Clear during morning hours of 31st Aug. Maximum temperature recorded ranged from 28.0 to 32.2 °C and minimum of 20.7 to 23.0 °C with mean relative humidity 93.8 % max and 71.3 % min was recorded in the past three days & average wind speed was 1.8 – 4.4 km/ hr.</p>	<p>Weather forecast for next five days of Thoubal (5th to 9th September, 2018) Likely to have light to moderate rains on Wednesday then no rain thereafter during next five days and partly cloudy to mainly cloudy sky with maximum temp. 31-32 °C & minimum temp. 22-24 °C. Relative humidity may reach upto 99 % (max RH) & 74 % (min RH). The average wind speed may be 2-4 km/hr.</p>
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Field Crops			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Rice	Panicle Initiation to flowering	Leaf folder	- Maintain water level at 5-8 cm. Spray Thiomethoxam @ 5g/ 15 lit of water.
		Case worm, Stem Borer/ Gall midge/Plant Hoppers or Thrips	Spray Coragen 3-5 ml per 15 lit of water at the early stage of infestation.
		Any sucking insect	Imidachloprid @ 8ml/ 15 litres of water.
Soybean/ Groundnut	Fruiting to seed maturity	Hairy caterpillars	- Avoid water logging. - For control of hairy caterpillars, dust 5% Malathion @ 20 kg/ ha to control it or spray Dichlorovos 76 EC 0.05% (0.6ml/ lit of water).
		Tikka disease in groundnut	- Spray Carbendazim @ 0.5g / lit of water to control Tikka disease in groundnut.
		Rust in soybean	- Prune or stake plants and remove weeds to improve air circulation and use a thick layer of mulch or organic compost to cover the soil. - Apply copper sprays or sulfur powders or bio-fungicide to prevent infection of susceptible plants.
Blackgram/ Rice Bean	Fruiting to seed maturity		- Avoid water logging. - Spray Dichlorovos 76 EC 0.05% (0.6ml/ lit of water) against hairy caterpillars.
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			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Fruit plants (Mango, Litchi, guava)	Nursery/ planting		Procure seedlings/ planting material of good strains of Mango, Litchi and Guava from reliable source. Select foothills/ hill slope areas for establishment of new orchards. For planting, make pit size of 1x1x1 foot.
French Bean, Broad bean & Pea	Land preparation		Land preparation for sowing of french bean, broad bean and pea may be done. Recommended varieties for French bean are – Pant Anupam, Anupam (to be planted at a spacing of 30cm x 45cm) and Tangkhul Hawai (local) (to be planted at a spacing of 30cm x 60cm with 2-3 seeds per hill). For broad bean, plant local variety at a spacing of 30cm x 45cm. And for pea, Arkel or Azad may be planted at a spacing of 10 cm x 30cm.
Cauliflower	Curd formation stage of early crop		- Weeding may be done.
	transplanting of main season crop		- Light watering during morning hours may be done till the plants get established.
	nursery of late crop		- Raise late crop cauliflower nursery.
Potato	Land preparation		- Select the area with fertile and sandy loam soil. Land preparation for planting potato for early crop and also for production of seed may be started in foothills and upland area.



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



Ginger/ Turmeric	Rhizome initiation		- Apply Phosphate solubilizing bacteria @ 3-5kg/ acre (1.6 sangam) with compost in soil as bio-fertilizer. - Avoid water logging in and around the crop field.
Orange	Nursery	Leaf Miner	- Spray Prophenophos + Cypermethrin (Rocket) @2.5 ml/lit of water at 10 days interval.

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.

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.
		• Management	• Do not allow to <i>consume muddy water to protect from E.coli infection. Use water sanitizer.</i>
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****4th 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 5th to 9th September, 2018 as below:

<p>Significant past weather for the preceding bi-weekly of Imphal - West (31st August to 3rd September, 2018) Observed 11.4 mm rainfall with mainly cloudy to overcast sky but Mainly Clear during morning hours of 31st Aug. Maximum temperature recorded ranged from 28.0 to 32.2 °C and minimum of 20.7 to 23.0 °C with mean relative humidity 93.8 % max and 71.3 % min was recorded in the past three days & average wind speed was 1.8 – 4.4 km/ hr.</p>	<p>Weather forecast for next five days of Ukhrul (5th to 9th September, 2018) Likely to have light to moderate rains on Wednesday then no rain thereafter during next five days and partly cloudy to mainly cloudy sky with maximum temp. 26-28 °C & minimum temp. 19-20 °C. Relative humidity may reach upto 99 % (max RH) & 76 % (min RH). The average wind speed may be 2-3 km/hr.</p>
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Field Crops			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Rice	Panicle Initiation to flowering	Leaf folder	- Maintain water level at 5-8 cm. Spray Thiomethoxam @ 5g/ 15 lit of water.
		Case worm, Stem Borer/ Gall midge/Plant Hoppers or Thrips	Spray Coragen 3-5 ml per 15 lit of water at the early stage of infestation.
		Any sucking insect	Imidachloprid @ 8ml/ 15 litres of water.
Soybean/ Groundnut	Fruiting to seed maturity	Hairy caterpillars	- Avoid water logging. - For control of hairy caterpillars, dust 5% Malathion @ 20 kg/ ha to control it or spray Dichlorovos 76 EC 0.05% (0.6ml/ lit of water).
		Tikka disease in groundnut	- Spray Carbendazim @ 0.5g / lit of water to control Tikka disease in groundnut.
		Rust in soybean	- Prune or stake plants and remove weeds to improve air circulation and use a thick layer of mulch or organic compost to cover the soil. - Apply copper sprays or sulfur powders or bio-fungicide to prevent infection of susceptible plants.
Blackgram/ Rice Bean	Fruiting to seed maturity		- Avoid water logging. - Spray Dichlorovos 76 EC 0.05% (0.6ml/ lit of water) against hairy caterpillars.
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			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Fruit plants (Mango, Litchi, guava)	Nursery/ planting		Procure seedlings/ planting material of good strains of Mango, Litchi and Guava from reliable source. Select foothills/ hill slope areas for establishment of new orchards. For planting, make pit size of 1x1x1 foot.
French Bean, Broad bean & Pea	Land preparation		Land preparation for sowing of french bean, broad bean and pea may be done. Recommended varieties for French bean are – Pant Anupam, Anupam (to be planted at a spacing of 30cm x 45cm) and Tangkhul Hawai (local) (to be planted at a spacing of 30cm x 60cm with 2-3 seeds per hill). For broad bean, plant local variety at a spacing of 30cm x 45cm. And for pea, Arkel or Azad may be planted at a spacing of 10 cm x 30cm.
Cauliflower	Curd formation stage of early crop		- Weeding may be done.
	transplanting of main season crop		- Light watering during morning hours may be done till the plants get established.
	nursery of late crop		- Raise late crop cauliflower nursery.
Ginger/ Turmeric	Rhizome initiation		- Apply Phosphate solubilizing bacteria @ 3-5kg/ acre (1.6 sangam) with compost in soil as bio-fertilizer. - Avoid water logging in and around the crop field.

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

Manipur Centre, Lamphelpat, Imphal - 795 004

“Gramin Krishi Mausam Seva”

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.			
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.
		• Management	• Do not allow to <i>consume muddy water to protect from E.coli infection. Use water sanitizer.</i>
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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